

Charles University
Faculty of Education

MASTER THESIS

**The Perceptions of Pre-Service Special- and General-Education
Teachers on the Inclusion of Children with Special Needs in the
Regular Classroom**

‘This dissertation is submitted in partial fulfilment of the joint degree
MA/Mgr. Special and Inclusive Education-Erasmus Mundus,
University of Roehampton, University of Oslo and Charles
University’

Franchez Lynette Torres

Supervisor:	Šárka Káňová Ph.D.
Study program:	Education
Study branch:	Erasmus Mundus Special and Inclusive Education

2016

DECLARATION

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ABSTRACT

The purpose of the study is to explore the perceptions of pre-service special- and general-education teachers in the Philippines about the inclusion of children with special needs (CSN) in the regular classroom. Teacher perception has been found to be a significant factor on implementing inclusion (Norwich, 1994; Elliot, 2008; Avramidis & Norwich, 2002). However, studies on this topic are lacking in the Philippines. The study employed a mixed method approach using both semi-structured interviews and survey using an adapted version of Saloviita's (2015) Teacher Attitudes to Inclusion Scale. The interviews were analysed using a thematic analysis and the survey data was analysed using two-way t-tests. The study determined that pre-service teachers in the Philippines had different sentiments about their prior experience and training on teaching CSN. Participants also had different definitions and understanding of inclusion. Moreover, the participants shared their concerns about the lack of sufficient teacher training and the current educational situation of the country as potential barriers to implementing inclusion. Lastly, the study also determined that there is a significant difference between the views of special- and general-education teachers, especially in their views on teacher roles and the feasibility of inclusion. The results of the study showed the need to strengthen teacher training in the country and to implement legislation that will determine how inclusive education is defined and implemented in the country.

KEY WORDS

Inclusive education, inclusion, children with special needs, pre-service teachers, pre-service training, student teachers, teacher perceptions, teacher attitudes.

DEDICATION

I would like to dedicate my dissertation to my family, friends and my loved ones. Without your support and faith, my dream would have remained a dream. I would also like to dedicate this to my fellow teachers, for their dedication and commitment to serve students. Lastly, I would like to dedicate this to all the Filipino learners, with or without special needs, you all deserve quality education.

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ABBREVIATIONS AND ACRONYMS

ADHD	Attention deficit hyperactivity disorder
BEEd	Bachelor of elementary education
BSE	Bachelor of secondary education
CSN	Children with special needs
DepEd	Department of Education
df	Degrees of freedom
EBD	Emotional-behavioural disorder
GenEd	General education
ID	Intellectual disability
IE	Inclusive education
IP	Indigenous peoples
MKO	More knowledgeable others
SPED	Special education
TAIS	Teacher attitudes to inclusive education
UNESCO	United Nations Educational, Scientific and Cultural Organization
ZPD	Zone of proximal development

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PREFACE

My inspiration for this study goes back to the moment I decided I wanted to be a teacher. I realized I wanted to shape minds, be with the little ones, and learn with them. I also remember being a newbie, in front of a class of wide-eyed, curious eight-year olds. I remember being scared and excited of what I will be doing with these students for a year and whether my teacher training had been enough. A few weeks later, is when I realized that I was not as prepared as I thought I should have been. I struggled most especially in teaching learners deemed to have special needs. I found myself doing my own research on what I can do to reach out to these learners. It was then that I decided to pursue this field. Although, there were so many things I also wanted to explore. I realized that at the heart of inclusive education, is me and my fellow teachers. I wanted to be able to explore their perceptions about IE, their concerns, their fears or whether they believed it all. I thought that knowing these was important because they will be the main agents of change if inclusion is to be achieved at all.

I take pride in my work as a teacher and I am one, who believe that our students deserve the best. Therefore, I also believe that our teachers deserve nothing less but the best teacher training that they can have. Through this study, I attempt to share our voice, the voice of those beginning the teaching profession. I am hoping that understanding their perceptions can somehow pave the way for changes to happen so that teachers will be better prepared to address the needs of diverse learners in the future.

1 INTRODUCTION

This chapter provides a description of the problem statement, and the significance and scope of the study. Additionally, this chapter describes the main and the subsequent research questions of the dissertation. Moreover, definition of essential terms used in the study will be presented.

1.1 BACKGROUND OF THE STUDY

In recent years, the Philippines has been pushing towards a more inclusive education for all learners. UNESCO (2009) defines inclusive education as “a process of strengthening the capacity of the education system to reach out to all learners and can thus be understood as a key strategy to achieve education for all” (p.8). Similar to those of the other countries, recent legislation and research in the country have been aimed at understanding inclusive education (IE) in the Philippine context. This thrust is reflected on its signing of international frameworks, such as the Salamanca Statement of 1994 and on its participation in the Education for All agenda (2000). More recently, the country also ratified the United Nations Convention on the Rights of Persons with Disabilities in 2008 (Committee on the Rights of Persons with Disabilities, 2014).

Recent legislation in the Philippines also echoes this inclusion agenda (UNESCO, 2015). The Enhanced Basic Education Act of 2013, for example, mandates the Department of Education (DepEd) to develop a basic education curriculum that is learner-centred, inclusive and developmentally appropriate (Enhanced Basic Education Act, 2013). Furthermore, the Early Years Act of 2013 also aims for the system to promote the inclusion of children with special needs (CSN) in early childhood classrooms through providing accommodation, accessible environment and mutual respect for diversity (Early Years Act of 2013).

However, despite these laws, current research shows that there is still a lack of grounded basis on how IE is to be realized in the Philippine context. Researchers have concluded that there is a lack of a shared understanding on the whats and the hows of IE in the country (Muega, 2016; Bustos, Preclaro-Ongtengco, Echavia, Tantengco & Manglicmot, 2014a). Bustos et al (2014a) examined the education

sector's readiness to provide and sustain services for indigenous peoples (IP) Muslims and children with disabilities in the Philippines. They found that certain policies issued by the DepEd are lacking and contradictory to the principles of IE as stated in the pertinent UNESCO (2009) guidelines.

Muega (2016) also notes that the Special Education Act (Philippine Senate Bill 3002) is still pending approval in the Senate (Senate of the Philippines, 2011). This, he argues is an important legislation, as it is envisioned to determine the practice of IE in general education classes. Furthermore, Muega (2016) explains that as of late, only the DepEd Order No. 72 s. 2009 determines the practice of IE in the country. The directive, titled "Inclusive Education as Strategy for Increasing Participation Rate of Children", recognizes the failure of special education in the Philippines to ensure access by majority of children with disabilities. Furthermore, it outlines the components of an inclusive program for children with special needs (DepEd, 2009), but how this will be achieved is yet to be explained (Muega, 2016). The pending Philippine Senate Bill 3002 (Special Education Act) states that:

"Children and youth with special needs are the gifted and fast learners and those who are disabled, impaired and handicapped persons in need of special education as well as service for rehabilitation. He/she differs from the average child in - (1) Mental characteristics; (2) Sensory abilities; (3) Neuromuscular or physical characteristics; (4) Social abilities; (5) Multiple handicaps; and for (6) Has a developmental lag to such as an extent that he requires modified school practices or special education services to develop to his or her maximum capability. They include person aged zero to twenty-one (0-21) years old and may be as follows:

- a) Gifted children and fast learners
- b) Mentally handicapped/Mentally retarded
- c) Visually impaired
- d) Hearing Impaired
- e) Student/Children with behaviour problems
- f) Orthopedically handicapped"

(Special Education Act, Section 4)

Similarly, this study shall use this concept of CSN. But Bustos et al, (2014b) in their research on IE, argue that the Philippines' concept of inclusion is different from the other contexts. They believe that IE in the Philippines also includes IP learners, Muslim learners and learners under difficult circumstances. However, this study shall focus on the inclusion of CSN in the general education classroom as defined in the proposed Philippine Senate Bill 3002.

In addition to understanding who is defined as CSN, it is also crucial to understand the operational definition of inclusion in the Philippine context. Inclusion, however, has been defined differently among different contexts (Ainscow, Booth and Dyson, 2006). The same goes for the Philippine context, where there is a lack of shared and agreed-on definition of inclusion. Bustos et al (2014b) conducted focus group discussions among educational leaders from different regions in the Philippines. They found that majority of the participants agreed that inclusion is the right to be accepted and to become an active participant in learning experiences with their peers despite their differences. However, they also found that many participants still loosely use the concept of inclusion and employ it interchangeably with terms like integration and mainstreaming, and that there is a lack of a clear definition from the DepEd (Bustos et al, 2014b). Similarly, Muega (2016) found that while parents, teachers and administrators are able to distinguish inclusion from what it is not, they were not clear about the adequacy of their perceived definition. Both research supports that the lack of a clear definition of IE may have negative consequences on the success of inclusion in the country (Muega, 2016; Bustos et al, 2014b).

Despite the challenge in defining inclusion in the Philippines, the study shall nevertheless operate on defining inclusion as it relates to disability and to students with special educational needs (Ainscow et al, 2006). While it is clear that the concept of IE in the Philippines refers to something more than CSN, this group shall be the focus of this study. Moreover, even as the usefulness of defining inclusion based on a specific group is being questioned (Ainscow et al, 2006), this view is still relevant in the Philippine context, as CSN still have limited access to and participation in mainstream education (UNESCO, 2015).

Although the perceptions of in-service teachers on inclusive education are found to be important, pre-service teachers' perceptions have also been the subject of a multitude of research studies in recent years. Shade & Stewart (2001) argued that pre-service teachers' attitudes towards inclusion also need to be examined. Sharma, Forlin, Loreman & Earl (2006) concluded that pre-service training is an ideal time to develop more positive perceptions on inclusion; pre-service programs should therefore concentrate on improving teacher's attitudes towards it (Alghazo, Dodeen & Alqaryouti, (2003). Bruster (2014) likewise claimed that generating knowledge on teachers' perceptions can ultimately lead to changes that will create a better learning environment for CSN.

1.2 STATEMENT OF THE PROBLEM

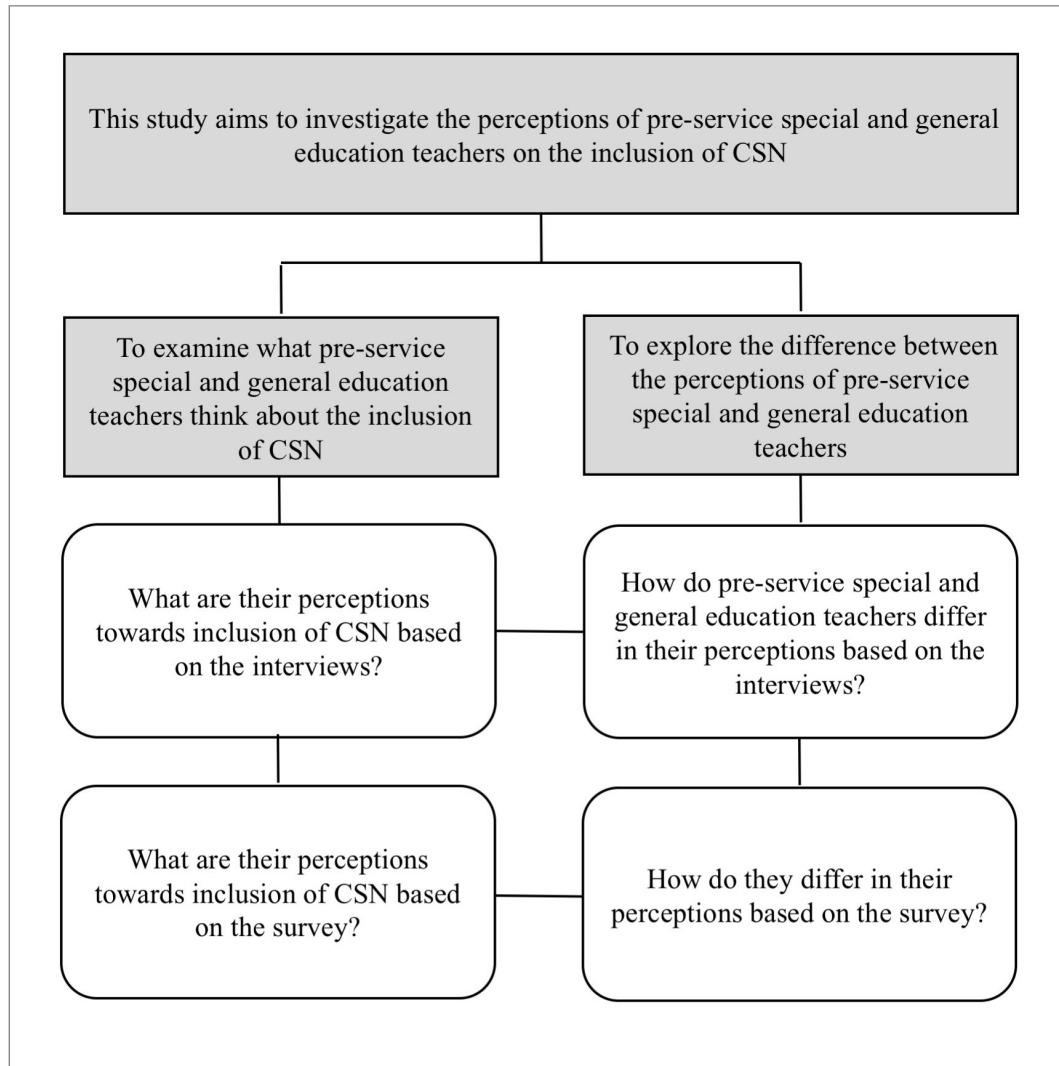
In having recognized the need to focus on pre-service teachers' perceptions on inclusion, it is then necessary to explore other variables that may contribute to the differences in these perceptions. One area of research focused on the difference between the perceptions of general- and special- education teachers. Parker (2009) examined the difference on the perceptions of general- and special-education teachers on the inclusion of children with mild disabilities, such as learning disabilities, mild mental retardation and emotional-behavioural disorders. Charley (2015) also made a similar study on elementary and middle-school teachers' attitudes and self-efficacy. These studies were both conducted in the United States and a similar study has yet to be undertaken in the Philippine context.

The current study aims to address this seeming lack of research on the perceptions of pre-service teachers' perceptions towards inclusive education in the Philippines. It is crucial for academics in the Philippines to address research gaps to further the inclusion agenda. The focus of the present study, therefore, will be the different perceptions of pre-service general- and special- education teachers about the inclusion of children with special needs. Furthermore, this study aims to explore how different factors, including these teachers' experiences and training, may be related to their perceptions. Data gathered in this study may also provide the basis for strengthening teacher education programs in the Philippines.

1.3 RESEARCH QUESTIONS

The diagram below explains the formulation of this study's aims and goals. It will enumerate the specific questions that guide the present study.

Scheme No. 1: Conceptualization of the Research Questions



Author's own analysis, 2016

1.4 SIGNIFICANCE OF THE STUDY

The perceptions of teachers have been found to be critical to their implementation of the inclusion agenda (Norwich, 1994). Given this, it is crucial that in the Philippine context, attitudinal and perceptual barriers towards inclusive education are also given importance. Furthermore, this area of research is relevant to the country's thrust towards inclusion in a multitude of ways. Firstly, the study has the

potential to provide relevant information to strengthen pre-service education programs in the country. With the intention to share data gathered from this research with universities and teacher-training institutions in the Philippines, key actors in the education sector will be enabled to evaluate what needs to be changed or improved in the teacher-education curriculum, in order to develop more positive teacher perceptions. It can also provide relevant information on the concerns of student-teachers in teacher-training institutions, and pave the way to finding solutions to address these concerns. Ultimately, this research signals the beginning of efforts to address perceptual and attitudinal barriers that exist in Philippine society.

On top of these, data gathered from the interviews can potentially benefit the participants themselves. As the questions are geared towards understanding their opinions, the study offers a chance for participants to reflect on and be critical of their own beliefs and biases. Having future teachers who would have more positive perceptions on inclusion will then be beneficial to learners with diverse needs.

1.5 DEFINITION OF TERMS

This section elaborates on the different terms used in the study to allow a full grasp the concept of the research. The limited official definitions in the country necessitates the contextualization of these terms in the Philippine setting. For example, the term “children with special needs” is more commonly used than “children with special educational needs”, as Philippine legislation only uses the former. Moreover, the term “pre-service teachers” is used rather than “student teachers”, with student teachers in the Philippines being education students in their last year of study and participating in the practice-teaching module.

The following definitions are offered for the significant terms used in the study:

Children with special needs (CSN) – children aged between zero and twenty-one years old that require modified- or special-education services to develop their maximum potential. The category includes gifted and fast learners, and children with disabilities (Senate of the Philippines, 2011).

Inclusion – a process and approach to addressing and responding positively to the diverse needs of children, youth and adults through increased participation in the society. It sees individual differences as opportunities to enrich learning. Inclusion involves changing the content, approach, structure and strategies relating to education for all children (UNESCO, 2005; UNESCO 2009a).

Integration / Mainstreaming – the selective placement of CSN in one or more regular- or general- education classes. Mainstreaming or integration generally perceives that students must be able to “keep up” with the work in general education classrooms (Rogers, 1993).

Basic-Education / General-Education Classroom / Regular Classroom – offers a program of education that typically developing children receive (Webster, 2015).

Special Education / Special Education Classroom – offers specially and individually designed instruction to meet the unusual needs of an exceptional student (Hallahan & Kaufmann, 2006; Heward, 2013).

Pre-service General-Education Teachers / General-Education Majors – students completing a bachelor’s degree in either elementary or secondary education specializing in other subjects apart from special education (University of the Philippines College of Education, 2016).

Pre-service Special-Education Teachers / Special-Education Majors – students completing a bachelor’s degree in either elementary or secondary education specializing in special education (University of the Philippines College of Education, 2016).

2 REVIEW OF RELATED LITERATURE

This chapter begins with the theoretical framework that supports the critical role of teachers' attitudes on the education of CSN. Further, it attempts to examine related research that has been done on the relationship between teacher perceptions and the implementation of an inclusive education. After establishing this relationship, the focus shifts on the factors that may possibly influence teachers' perceptions. The last part presents the author's conclusion about the related literature in relation to the present study.

2.1 THEORETICAL FRAMEWORK

In addition to the legislative basis for inclusion, Vygotsky's social development theory also provides a sound foundation for a more inclusive education. Vygotsky's well-known theory of the zone of proximal development (ZPD) refers to the distance between the actual developmental level achieved through independent problem-solving and the level of potential development that can be achieved with the guidance of adults and more capable peers (Vygotsky, 1978). Although Vygotsky's theory is often used to discuss assessment and instruction, it also emphasizes the relationship between the individual learner and the environment. He also stresses the importance of the more knowledgeable other (MKO), which could be the teacher or the students' peers inside the classroom (Daniels, 2009; Bruster, 2014).

Aside from looking at the teacher's role in a child's learning, it is also essential to examine their impact on a child's affective development. Erikson's psychosocial theory supports the importance of a child's social environment in both cognitive and affective development (Daniels, 2009; McLeod, 2013). The theory propounds that teachers, as part of a school-age child's social environment, play a crucial role in the latter's overall development. Additionally, Urquhart (2009) states that a positive emotional relationship between a teacher and a learner is necessary to successful learning, regardless of the classroom placement. Building this constructive relationship, however, entails positive attitudes and beliefs from teachers. In this regard, the perceptions of teachers should be one of the priorities in the inclusion agenda.

2.2 IMPLICATIONS OF TEACHER PERCEPTIONS

Teacher perception has been shown to have different implications on the success of inclusive education; UNESCO (2016) argued that negative attitudes lead to discrimination. They argue that when teachers do not have positive attitudes towards CSN, it is improbable that these learners will receive quality education (UNESCO, 2016). Students and parents in Canada also shared the same sentiments. Pivik, McComas & LaFlamme (2002) that negative attitudes as resulting from lack of knowledge and awareness, are perceived to limit the access of CSN to a more inclusive setting. Further studies also reveal that teacher perceptions also influence the different aspects of a successful learning environment for students with special needs such as teaching practices and instruction.

Elliot (2008), for example, suggests a relationship between teachers' attitudes towards inclusion and teacher effectiveness. In his study of elementary physical-education teachers, he found that teachers with a more positive attitude provided more practice opportunities for students, regardless of whether these students had disabilities or not. Although his study does not show how the teachers' attitudes affect their students' success in any given motor task, it does reflect that such attitudes were related to their teaching practice (Elliot, 2008). In another study, Kuyini and Desai (2007) also concluded that the teachers' attitudes and beliefs predicted whether or not certain teaching practices will be effective. In their study of primary school educators in Ghana, they compared the teachers' knowledge and attitudes towards inclusive education, with their instructional delivery. They found that teachers who held more positive beliefs and had more knowledge of support services were providing more adaptive instruction to their students (Kuyini & Desai, 2007).

Additionally, the teachers' attitudes also influence student perceptions and academic outcomes. Monsen and Frederickson (2002) evaluated the impact of the teachers' attitudes towards mainstreaming on the students' perceptions of their classroom learning environment. In their quantitative study conducted among teachers and pupils in New Zealand, they found that teachers with a more positive attitude towards mainstreaming had a higher level of satisfaction and their classes

had a lower level of classroom friction. Moreover, the classroom learning environment of teachers with a highly positive attitude may also lead to more positive academic outcomes for students (Monsen & Frederickson, 2002).

Similarly, Khlem (2014) found that teachers' beliefs may also influence students' performance on a large-scale achievement test. In her study, she evaluated middle-school general and special education teachers on their attitudes and practices towards the skills of students with disabilities. She then compared their attitudes with the students' scores on a large-scale achievement test. She concludes that teachers' attitude towards the skills of students with disabilities was a significant predictor of the students' scores on an achievement test. She also suggests that a more positive attitude result to a higher student achievement (Klehm, 2014).

2.3 PERCEPTIONS OF TEACHERS ABOUT INCLUSION

Given the importance of the teachers' perceptions about inclusion, many research studies have attempted to find out the different attitudes and beliefs that teachers have towards the inclusion of CSN. However, these studies reveal conflicting findings on teachers' perceptions about inclusion. Scruggs and Mastropieri (1996) carried out a synthesis of 28 investigations on teachers' perceptions about mainstreaming and inclusion in the United States. In their study, they found that two-thirds of general-classroom teachers were supportive of the inclusion concept. However, fewer teachers were willing to include students with disabilities. They also discovered that while majority of the teachers felt that inclusion was beneficial, most of the teachers did not believe they were skilled enough to implement the inclusion agenda or that they have sufficient resources to achieve this (Scruggs & Mastropieri, 1996). A more recent study by Avramidis and Norwich (2002) also proved that generally, there is positive attitude towards inclusion among in-service teachers. However, they also learnt that most teachers do not subscribe to the "total inclusion" approach. Total inclusion meant that the mainstream classroom is the only school placement appropriate for a child with special needs. They concluded instead that teachers had different opinions on the school placement of CSN, and that these opinions are strongly influenced by the type of the students' disability (Avramidis & Norwich, 2002).

In contrast, de Boer, Pijl and Minnaert (2009) found that majority of regular primary-school teachers have neutral or negative attitudes towards inclusion. Their review of 26 studies revealed that majority of pre-school teachers do not feel knowledgeable and competent enough to teach CSN (de Boer, Pijl & Minnaert, 2009). They also found that, similar to the findings of Avramidis and Norwich, the type of the students' disability is related to the teachers' attitudes.

In addition to research studies comparing in-service teachers' perceptions of inclusion, the perceptions of pre-service teachers have also been examined by various scholars. Some studies have revealed that pre-service teachers are generally positive towards the inclusion of students with special needs (Avramidis, Bayliss & Burden, 2000a; Beacham & Rose, 2011; Sharma et al, 2006; Varcoe & Boyle, 2014). On the other hand, some concluded that pre-service teachers held neutral to negative attitudes regarding inclusion (Sari, Celikoz & Secer, 2009; Alghazo et al, 2003; Sharma, Moore & Sonawane, 2009).

While there are conflicting research findings on whether or not pre-service teachers hold more positive attitudes towards inclusion, there are similarities between the different variables related to the student-teachers' perceptions. Hastings and Oakford (2003), for instance, found that student-teachers trained to work with older children were less negative about the impact of inclusion; a study by Barnes and Gaines (2015) also arrived at a similar conclusion. In their study of kindergarten to fifth grade teachers, they concluded that teachers of younger children had a less positive attitude towards inclusion. On the other hand, research on whether gender is a factor towards teachers' attitudes towards inclusion show conflicting findings. Avramidis et al (2000a) found that female student-teachers were more positive in their perceptions compared with male student-teachers. Sari et al (2009), on the contrary, determined that although majority of their respondents were female Turkish student-teachers, their attitudes towards inclusion remained neutral. Similarly, Alghazo et al (2003) found no significant differences between the attitudes of male and female pre-service Arab educators.

Additionally, cultural differences were thought to be a factor in the development of a more positive attitude among teachers. In a cross-cultural comparison of the

situation in Canada, Hong Kong, Australia and Singapore, it was found that student-teachers from western countries had more positive sentiments (Sharma et al, 2006). This was also the same conclusion of a study comparing pre-service teachers in Australia and Singapore (Sharma, Ee & Desai, 2003). Moreover, there is also a possibility that the concept of inclusion is relatively new in these Asian countries, which may explain the differences in attitudes. (Sharma et al, 2006; Sharma, Forlin, Loreman, 2007).

On another note, some research studies focused on in-service and pre-service teachers' concerns about inclusive education. Smith and Smith (2000) found that in-service teachers are concerned about the inadequacy of their training to prepare them for working in inclusive classrooms. Similarly, Sharma et al (2007) pointed out that, consistent among the pre-service teachers in three of the four countries they studied, lack of skills was among the teachers' primary issues. Ahsan, Sharma & Deppeler (2012) also said that pre-service teachers were also concerned about giving appropriate attention to students with special needs.

Additionally, in-service and pre-service teachers in Asian countries also have similar concerns about academic achievement. Yadav, Das, Sharma and Tiwari (2015) studied the perceptions of Indian in-service teachers and found that teachers were more concerned about issues relating to academic achievement. Sharma et al (2007) also highlighted similar findings in their study involving pre-service teachers in Hong Kong. They attributed these issues to the highly competitive academic standards being implemented in both countries.

Other notable differences are on the workload of teachers and their beliefs about classroom placement. Saloviita and Schaffus (2016) determined that in-service teachers in Germany believed that the inclusion of CSN needs creates more work for them compared to the workload of Finnish teachers. On the other hand, pre-service teachers in Hong Kong, Singapore, Australia and Canada rated the issue of workload as the least of their concerns (Sharma et al, 2007). Mangope, Mannathoko & Kuyini (2013) meanwhile found that the attitudes of pre-service physical education teachers are adversely affected by their workload concerns.

Additionally, teachers' beliefs about classroom placement differ across cultures. Only a quarter of the German teachers and half of the Finnish teachers surveyed agreed that the education of CSN can be effectively supported in a regular classroom (Saloviita & Schaffus, 2016). Another study by Hull (2005) concluded that among the general and special education teachers surveyed, only a third believe that the inclusion of children with special needs in the classroom is feasible. Burke and Sutherland (2004), in comparing in-service and pre-service teachers, meanwhile argued that pre-service teachers believed that students with special needs can be included in the regular classroom.

2.4 PERCEPTIONS OF SPECIAL AND GENERAL EDUCATION TEACHERS

Another area that has gained attention in the past years is the comparison of the perceptions of general education teachers and special education teachers. In the numerous studies comparing their perceptions, it was revealed that special education teachers hold more positive attitudes compared with the attitudes of general education teachers (Buell, Hallam, Gamel-McCormick & Scheer, 1999; Elhoweris & Alsheik, 2004; Carter & Hughes, 2006; Parker, 2009; Charley, 2015; Bruster, 2014). While such was the general finding of different studies, there were notable similarities and differences between and among these perceptions. In a study, Parker (2009) examined the differences in the perceptions of secondary general teachers and special education teachers who have or have had students with mild disabilities in the classroom. She concluded that special education secondary teachers have a more positive attitude towards students with mild disabilities. However, both special and general education teachers shared the same viewpoints on the advantages and disadvantages of this inclusion (Parker, 2009). Similarly, Carter and Hughes (2006) explored the perceptions of general and special educators, paraprofessionals and administrators on the inclusion of secondary students with severe disabilities. They found that general and special educators agreed on the benefits of including children with severe disabilities in a general education classroom (Carter & Hughes, 2006). On the other hand, Bruster (2014) made a similar study on the perceptions of secondary school teachers and concluded

that special education teachers hold more positive views on the benefits of inclusion than the views of their general-education counterparts (Bruster, 2014).

In addition to the perceived benefits of inclusion, general and special education teachers also differed in their views on the different aspects of inclusion. Bruster (2014), for instance, explained that special education teachers were much more positive in their overall perceptions, influence on other children without disabilities, and classroom management. However, she also found no significant difference in the two groups' self-efficacy, or belief that they are able to produce the desired outcomes of inclusion (Bruster, 2014). This was contrary to the previous findings of Buell et al (1999) that special education teachers have rated their efficacy higher than that of general education teachers. Moreover, it was also revealed that special education teachers seemed to be more confident and prepared in performing inclusive tasks, such as adapting the curriculum, when compared with general education teachers (Buell et al, 1999).

Many studies also pointed out the differences among teachers as regards the feasibility of and the barriers against inclusion. Elhoweris and Alsheikh (2004) suggested that special education teachers in the United Arab Emirates were more supportive of inclusion, believing that it benefits all, and that general-education classrooms can support the needs of all students. General-education teachers and special-education teachers also perceived barriers to inclusion differently. As Carter and Hughes (2006) pointed out, general-education teachers perceived the limited time in class as the biggest barrier, while special education teachers identified negative attitudes as the biggest barrier for them (Carter & Hughes, 2006). These differences in the teachers' views on student outcomes have also been examined by Hull (2005), who argued that general- and special- education teachers have varying expectations on student outcomes, including those of academic, social, functional and life skills. She also maintained that the students' aims varied according to the type of their disability. This was similar to Carter and Hughes' (2006) findings that special-education teachers valued social interaction more than they did other academic or instructional areas. Another important finding by Orr (2009) was that

most general-education teachers expected special-education teachers to be liable for students with special needs.

2.5 FACTORS INFLUENCING PERCEPTIONS

In this section, the different factors found to be associated with teachers' perceptions will be discussed. Prior studies have shown that the type of disability, training and knowledge, and experience are relevant variables to the formation of different attitudes.

2.5.1 Type and Degree of Special Needs

Aside from the differences in teachers' perceptions of inclusion, many of the research studies done have also probed the different factors associated with the formation of teachers' perceptions. One such factor is the type and degree of a child's disability. Avramidis et al (2000b), in a study of in-service teachers, that children with emotional-behavioural disorders caused more concern and stress than those with other types of disabilities. Orr (2009) elaborated that general education teachers seem to feel more negatively towards students who require modified instruction and students with emotional-behavioural disorders. These findings were also similar to the attitudes of pre-service teachers. In a study by Hastings and Oakford (2003) of UK student teachers, student teachers were found to hold more negative views on including children with emotional and behavioural problems than on including those with intellectual disabilities. A similar survey on secondary student-teachers in the UK also showed this pattern. Avramidis et al (2000a) claimed that although student-teachers were mostly positive about inclusion in general, their belief on their competence dropped significantly with the severity of the students' needs. Loreman, Forlin and Sharma (2007) noticed the same perception among international pre-service teachers. They found out that generally, pre-service teachers held the most positive attitudes towards children who have academic and physical needs. They were, however, least positive about including children with behavioural issues (Loreman et al, 2007). Hull (2005) concluded that 94 percent of general and special educators surveyed believed that the type of children's disabilities also determined the children's educational placement.

2.5.2 Training and Knowledge

In addition to the type and severity of disability, another factor that plays a significant role in the development of perceptions is the knowledge possessed and training received by teachers. An overwhelming number of research studies demonstrated that more training and knowledge result in a more positive perception towards including CSN. Among in-service teachers, for example, the training they have had and their level of professional development positively affected their attitudes towards inclusion (de Boer et al, 2013; Avramidis et al, 2000b, Charley, 2015). Secer (2010) examined the direct effect of an in-service training course on inclusion, and concluded that in-service teachers initially held negative attitudes but these became more positive after completing the course.

The same can also be gleaned from studies on pre-service teachers. Research studies comparing the perceptions of pre-service teachers yielded the same conclusion: that knowledge and training in handling and teaching CSN are significant factors that influence teachers' attitudes (Sharma et al, 2007, Loreman et al, 2007, Sharma et al, 2003). A cross-cultural study of four countries revealed that an increased knowledge of the pertinent disability laws and policies meant fewer concerns about inclusion. Avramidis et al (2000a) also reported that 60 percent of the student-teachers surveyed in the UK believed that additional knowledge on disabling conditions and on strategies was useful in changing the teachers' perceptions about inclusion. Furthermore, they added that additional training on handling children with emotional-behavioural disorders is also necessary.

In addition to these findings, the role of training and knowledge on student-teachers' attitudes can be seen in the effects of providing inclusive-education courses to pre-service teachers. In a study by Campbell, Gilmore & Cuskelly (2003), pre-service teachers who underwent a training course on Down's syndrome, not only acquired more accurate knowledge about the disability but developed more positive attitude towards inclusion. This was also evident in Beacham and Rouse's (2012) study among pre-service teachers in Scotland; although the pre-service teachers they surveyed already had a positive attitude at the onset, this attitude was sustained even when they engaged in actual school-teaching experience. Another

interesting finding, by Shade and Stewart (2001), showed that a single course on inclusion improved the attitudes of student-teachers especially as regards their beliefs about the behaviour and self-concept of the child. More interestingly, they found that this course was beneficial to both general-education and special-education pre-service teachers.

2.5.3 Experience

Unlike the results of studies on the role of training and knowledge, those of studies on the role of experience in developing more positive perceptions were mixed. A study of general-education teachers by Barnes and Gaines (2015) revealed that teachers who have less experience in inclusive education tended to have a more positive attitude compared with those who have more experience. Similarly, Showalter-Barnes' (2008) study on regular-education teachers for students with autism showed that the more experienced teachers are less likely to be tolerant of changes and may be fearful of including diverse learners. In contrast, studies by Avramidis et al (2000b) and Avramidis and Kalyvva (2007) both reported that teachers who have been more actively implementing the inclusion agenda had more positive perceptions towards it.

In the studies on pre-service teachers, the influence of experience on teacher perceptions likewise varied. Hastings and Oakford (2003) concluded that there is little evidence to support that student-teachers' training background or prior experience had significant influences on their attitudes. However, other research studies showed that prior experience is closely associated with the formation of teachers' perceptions. Burke and Sutherland (2004) examined whether or not knowledge and experience are related to the formation of teachers' perceptions. They found out that experience had a positive influence on the perceptions of American pre-service and in-service teachers. The same findings were also noted in studies by Sharma et al (2006) and Sharma et al (2003) among pre-service teachers in Australia, Canada, Singapore and Hong Kong, which concluded that majority of the pre-service teachers surveyed were more confident about and more positive towards inclusion if they have prior experience in working with CSN (Sharma et al, 2008; Sharma et al, 2003). The student-teachers also believed that

their experience during their pre-service training is necessary to foster positive attitudes among them.

It is, however, equally important to examine the effects of teachers' experiences on their attitudes. Research shows that positive experiences are necessary to foster positive attitudes (Brownlee & Carrington, 2000; Hobbs & Westling, 1998; Leatherman & Nieyemer, 2005). However, it can also be argued that the kind of experience that teachers have may influence the perceptions they are likely to develop. For instance, Parasuram (2006) investigated different variables affecting teachers' perceptions of disability and inclusion in India, and discovered found that teachers who know or have previously interacted with a person with disability also had a more positive attitude towards CSN. Moreover, no significant difference was recorded between the perceptions of teachers with disabled family members and those of teachers who do not have relatives with disabilities (Parasuram, 2006).

2.6 TEACHER PERCEPTIONS ON INCLUSION IN THE PHILIPPINES

While studies on teacher perceptions about inclusion abound in other countries, the same cannot be said for the Philippine context. A preliminary cross-cultural study by Leyser, Kapperman and Keller (1994) on teachers' attitudes towards mainstreaming revealed that majority of the Filipino teachers surveyed had a neutral disposition towards mainstreaming. It was also found that although there are eight categories of handicapped children being accommodated in different educational facilities, this number represents less than 1 percent of the total population of CSN in the country. Leyser et al (1994) claimed that Filipino teachers' disposition can be attributed to cultural, ethnic and religious differences, and concluded that existing educational problems, such as the unavailability of support services, may explain their perceptions.

A more recent study by Muega (2016) investigated the perceptions of administrators, parents and teachers on inclusive education. In examining the current level of knowledge of the participants, Muega (2016) discovered that most of the participants are supportive of inclusive education, but are unsure if they have sufficient knowledge of the subject. Many participants believed there is a lack of training for teachers in handling CSN (Muega, 2016). It is not surprising thus that

many teachers doubt their preparedness to include CSN in their classes (Muega and Echavia, 2011 cited in Muega, 2016). Similar to the previous findings of Leyser et al (1994), the teachers' feelings of inadequacy and unpreparedness may also be explained by the grave educational problems besetting the Philippines, such as overcrowded classrooms and the lack of resources.

However, Muega (2016) also concluded that the concerns of teachers can also be traced back to their pre-service training level: to date, there is no law or policy that requires a course on inclusive education for pre-service teachers. He argued that this may be a determining factor as to why teachers are uncertain of their knowledge of inclusion (Muega, 2016). Another study revealed that having even just a single course on inclusion may improve the attitudes of pre-service teachers towards inclusion. Bustos et al (2012) examined the perceived benefits of the subject "Inclusive Education", which was required for all student-teachers studying at a Philippine university; majority of the participants believed that the course positively influenced their beliefs towards inclusion. The participants argued that the course enabled them to accept all kinds of learners and celebrate the diversity of their classrooms. They also believed, however, that the course was not as effective in equipping them with strategies to manage an inclusive classroom. (Bustos et al, 2012).

2.7 SUMMARY AND CRITICAL REFLECTION

This chapter presents findings from related literature that are deemed relevant to the present study. The theories of Vygotsky and Erikson, described in the first part of the chapter, demonstrate the importance of the teacher in creating a successful learning environment. Vygotsky and Erikson's theories also reflect the relevance of teachers' perceptions on the success of an educational agenda, in this case, the inclusion of CSN. This was also established by other studies that show how teachers' perceptions influence their practices, and the students' perceptions and student outcomes (Elliot, 2008; Kuyini & Desai, 2007; Monsen & Frederickson, 2002; Khlem, 2014).

However, studies on teacher perceptions have produced varying results. Many studies have also compared the perceptions of different kinds of teachers: pre-

service and in-service teachers, and general- and special-education teachers. Most research studies show that pre-service teachers hold more positive attitudes towards inclusion compared with in-service teachers. It was also established in other studies that different factors significantly influence teachers' perceptions; these factors include gender, target age group, level of experience, workload concerns and country policies (Hastings & Oakford, 2003; Barnes & Gaines, 2015; Avramidis et al, 2000a; Alghazo et al, 2003; Sharma et al, 2006; Sharma et al, 2003; Sharma et al, 2008). It was also revealed that both in-service and pre-service teachers share similar sentiments about academic achievement, their perceived lack of knowledge and skills and the feasibility of the inclusion agenda (Smith & Smith, 2000; Mangope et al, 2013; Saloviita & Schaffus, 2016).

In addition, a comparison of general- and special-education teachers revealed similarities and differences between and among teachers' perceptions. Most research studies showed that special education teachers hold more positive attitudes compared with general education teachers. However, they also share certain similarities as regards the different aspects of inclusion, such as the advantages and disadvantages, their self-efficacy and their ideas of what could be considered as barriers to inclusion (Parker, 2009; Bruster, 2014; Charley, 2015).

The last part of the study also explains a summary of the different factors found to be crucial in the formation of teachers' perceptions. The type and degree of disability is often seen as an important variable (Avramidis et al, 2000b), and so are training and knowledge. It was also established in the literature review that additional training on inclusion helps to foster positive attitudes (de Boer et al, 2013; Secer, 2010) among teachers. Lastly, the teachers' prior experience with people with special needs also influences their perceptions towards CSN (Barnes & Gaines, 2015; Avramidis & Kalyvva, 2007).

While there is a multitude of conclusions offered by the cited studies, some findings are deemed crucial in establishing the need for this particular research. First, as established in previous research studies, the perceptions of pre-service and in-service teachers vary. Given the limited research on the perceptions of pre-service teachers about inclusion in the Philippines, it is therefore necessary to explore the

views of Filipino student-teachers as well. Secondly, the differences between general- and special-education teachers have also been established in previous research studies. As is the case in other countries, special- and general-education teachers receive different kinds of training in the Philippines. It is the purpose of this research thus to also explore the similarities and differences between and among the perceptions of pre-service special- and general-education teachers on inclusive education. Further, the factors seen to influence teachers' perceptions are also explored in this study, to determine whether or not these factors also play a role in the development of Filipino teachers. Lastly, as the country's policies also influence teachers' perception, it is imperative to examine teachers' perceptions in the context of the Philippine legislation and policy-making.

3 RESEARCH DESIGN AND METHODOLOGY

This chapter shall explain the chosen design and methodology for the research study. It shall also explain the sampling technique, data collection and analysis procedures. Lastly, it discusses the ethical considerations, and presents a summary of the whole chapter.

3.1 RESEARCH DESIGN

This exploratory research employs a mixed-methods approach to understand the perceptions of pre-service general- and special-education student-teachers towards the inclusion of CSN. The mixed-methods research is an inquiry approach that combines both quantitative and qualitative techniques (Newby, 2014). Creswell (2014) argues that this research method assumes that combining qualitative and quantitative approaches provides a better understanding of the research problem. It is also proposed that the method is particularly useful in educational research where issues tackled are usually complex (Newby, 2014). This design was chosen to complement the multifaceted aspect of teachers' perceptions. Johnson & Onwuegbuzie (2004) believes that this approach can provide more valuable data, as it can capitalize on the strength of both quantitative and qualitative approaches.

The research has a partially mixed concurrent dominant status design. Although many typologies explain the research design in mixed-methods research, Leech and Onwuegbuzie's (2009) typology of mixed-method research design is used here because of its simplicity and usefulness in this particular research. They argue that three criteria best define mixed method research design: the level of mixing, the time orientation and the emphasis of approaches. They explain that this design entails the conducts of the two facets of the research at the same time, but one facet is given greater emphasis. Data are also analysed separately before comparisons and inferences are made.

In a way, it is similar to Creswell's (2014) convergent parallel mixed method design, where the researcher collects data and at the same time integrates the information in the interpretation of the result. The diagram below shows the mixed-method research design typologies made by Johnson and Onwuegbuzie (2004).

Schema No. 2: Mixed Method Research Designs

		Time Order Decision	
		Concurrent	Sequential
Paradigm Emphasis Decision	Equal Status	QUAL + QUAN	QUAL → QUAN QUAN → QUAL
	Dominant Status	QUAL + quan QUAN + qual	QUAL → QUAN qual → QUAN QUAN → QUAL quan → QUAL

Johnson and Onwuegbuzie, 2004

In this study of the perceptions of pre-service general-education and special-education teachers, two types of data shall be collected. Semi-structured interviews with pre-service general- and special-education teachers on their final year of training shall be the main source of information. The selection criteria, sampling techniques and data-analysis method used for this facet of the study will be discussed in subsequent sections of this chapter. The other part of the study involves a survey questionnaire administered to a larger sample of pre-service general- and special-education teachers. The instrument used for the survey is an adapted version of the Teacher Attitudes to Inclusive Education Scale by Saloviita (2015). More information on the survey instrument, participants and data-analysis procedures will be discussed in the subsequent sections.

The research design was chosen, firstly, because using both types of data-collection procedure allows for better time management, especially as the study was conducted within a limited period. The quantitative aspect of the study is the dominant source of information, given the exploratory nature of the research. To the best knowledge of the researcher, no other study has been done on the perceptions of pre-service general- and special- education teachers; interviews thus are expected to give better insight into the subject at hand. However, to support

these findings, it is also crucial to compare certain quantitative information, such as attitude scores based on a reliable attitude scale measurement tool. The survey also offers an opportunity to gather information on demographic variables, such as training and experience of a larger sample of participants. Combining these approaches is thus expected to give a more holistic understanding of student-teachers' perceptions towards inclusion.

3.2 SAMPLE AND SAMPLING TECHNIQUES

The chosen sample are pre-service teachers currently enrolled in the College of Education of the University of the Philippines. The College of Education is considered to be a premier teacher-training institution by different government agencies in the Philippines (University of the Philippines College of Education, 2016).

The College currently offers two four-year bachelor's degree programs: the Bachelor of Elementary Education (BEEd) trains pre-service teachers to teach in the elementary and pre-school level, and the Bachelor of Secondary Education (BSE) trains pre-service teachers to teach in the secondary or high school level. In each bachelor program, areas of concentration or majors of study are chosen by the students. The following areas can be chosen by those under the BEEd: art education, mathematics, science and health education, teaching in the early grades, communication arts (English) and special education. BSE students can choose from the following areas: art education, biology, chemistry, communication arts (English or Filipino), health education, mathematics, physics, social studies and special education. For the purpose of this research, students are classified into two main categories: special-education majors and general-education majors. General-education majors are those whose area of concentration is not special education, regardless of whether they are under the BEEd or BSE program.

Six participants were selected for the interview: three special-education majors and three-general education majors. All the interviewees are final-year students, enrolled in their last semester in the college which includes the student-teaching or practicum program. The practicum is an apprenticeship designed to hone and apply pre-service teachers' skills in the actual operation of the school. The table below

shows the demographic data for each interviewee, including their assigned number code used to protect their privacy.

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Table No. 1: Demographic Data of Interviewees

Interviewee Number Code	Degree and Major	Sex
S1	BEED - Special Education	F
S2	BSE - Special Education Minor in Physical Education	M
S3	BSE - Special Education Minor in Math	F
G1	BSE Major in Biology (General Education)	M
G2	BEEd Major in Science and Health (General Education)	M
G3	BEEd Major in Teaching in the Early Grades (General Education)	F

Author's own analysis, 2016

The final-year participants were also selected since they are on their last semester and the training they have received is almost complete relative to their specific programs. The interview participants were then selected through convenience sampling. The researcher sent invitations to all final-year pre-service teachers and those who responded first were chosen for the interviews.

The interviewees are currently placed in different school settings. The special-education majors are assigned as shadow teachers of one CSN, enrolled in an inclusive school. The general-education majors are assigned to teach one class in a regular school.

For the survey, the researcher used a randomized sampling technique to gather participants from all the pre-service general-education and special-education majors currently enrolled in the college. There are 294 undergraduates officially enrolled in the first semester of the current year, and 51 are special education majors. In this study, the researcher distributed 90 survey forms but only 72 were valid. To round it off, two survey forms were randomly selected to be removed from the study. In total, there were 35 special-education majors and 35 general-education majors who were able to participate in the study. This number is about 27% of the total population, and is therefore a good representation of the chosen population.

3.3 DATA COLLECTION AND RESEARCH TOOLS

The two main tools employed in the study are the semi-structured interview and the adapted version of the Teachers' Attitudes towards Inclusive Education Scale by Saloviita (2015). This section explains the selection and development of these tools for the present study. It also explains how data were gathered from both the interviews and the survey method.

3.3.1 Semi-Structured Interviews

One main research tool for this study is the semi-structured interviews conducted with final-year student service teachers. Newby (2014) explains that semi-structured interviews are somewhat in between the questionnaire and the evolving interview. However, there is an interview guide that outlines the topics to be covered. In this particular research, the researcher conducted two pilot interviews to test the preliminary version of the interview guide. Afterwards, analysis and reflection on the results of these pilot interviews were used to create the final interview guide (see Appendix A). The interview guide was created based on the literature review on the topic. The different aspects of inclusion included in the interview guide were reflective of prior research that was done on teachers' perceptions. However, the researcher asked follow-up questions after the participants' response.

Before the interview, the researcher explained the details of the study to potential participants. Electronic and telephone correspondence was done to invite potential interviewees. The first three respondents from each group (special education and general education) to give their reply were chosen to be the final respondents. The detailed information sheets and consent forms were then sent to the final participants prior to the interview (see Appendix B and C).

Semi-structured interviews were conducted face-to-face. Audio-recording was done to collect the interview data. The interviews were done within 40 to 50 minutes each. Although the questions were in English, participants were allowed to use a mixture of English and Filipino to better express their thoughts. All transcriptions were translated to English.

3.3.2 Teacher Attitudes to Inclusion Scale

An adapted version of Saloviita's (2015) Teachers' Attitudes towards Inclusive Education Scale (TAIS) was used in the survey part of this study. The TAIS was designed to measure pre-service teachers' attitudes towards inclusion, based on its definition in the Salamanca Statement of 1994. The Likert scale-type questionnaire has been shown to have high validity and unidimensionality (Saloviita, 2015). Likert scales measure the strength of agreement or disagreement of respondents to a particular statement. The strength of this instrument is that it is able to assess different aspects of the respondents' attitudes (Manstead & Semin, 2001). In this ten-item questionnaire, respondents are asked to choose which response best reflects their opinion on each of the ten statements. There are four choices given to the respondents: strongly disagree, disagree, agree and strongly agree. Each of the items is scored based on whether it shows a more positive or negative attitude towards inclusion.

This particular tool was chosen in light of the lack of definition of inclusive education in the Philippine context. As was established before, the country is a signatory to the Education for All agenda, and therefore operates under the definition of inclusive education provided by the Salamanca statement. The number of items and simplicity of the statements were determined to be sufficient for the

purpose of the research. In addition, themes that were gathered from the literature review were similar in nature to the themes identified by the TAIS.

The scale was adapted in a number of ways to better serve the purpose of the research. First, some items in the scale were changed. In the original tool, there were two statements pertaining to the rights of the child:

- Statement 3: It is the right of a child with special educational needs to get into a special education classroom.
- Statement 9: A child with special educational needs should be moved to a special educational classroom in order not to violate his/her legal rights.

In the final survey tool, statement nine was removed as the question seemed too similar to statement 3 when measuring teachers' perceptions about inclusion as a right. It replaced by a statement on another important aspect, the type of disability of the student as a factor in teachers' perceptions. Many research studies have concluded that the type of disability is a big influence on teachers' perceptions (Avramidis et al, 2000b; Orr, 2009; Hastings & Oakford, 2003). Therefore, to be able to reflect the influence of the type of disability, it was reflected in three statements in the final survey:

- Statement 2: The education of children with emotional behavioural problems should be arranged in mainstream classrooms with the provision of adequate support.
- Statement 4: Children with physical impairments (visual, hearing, mobility etc.) should be admitted in mainstream classrooms with adequate support.
- Statement 9: The education of children with less severe disabilities, such as ADHD and learning disabilities, should be in a regular classroom.

Some words in the final survey tool were also changed to facilitate understanding by the respondents:

- Statement 5: Teachers' workload should not be *increased* (originally, *augmented*) by compelling them to accept children with special educational needs in the classroom.

- Statement 7: The education of students with special educational needs should be done *as much* (originally, *as far*) as possible in mainstream classrooms.”

In addition to the scale included in the final survey tool, participants were also asked to complete a demographic questionnaire that includes their specific degree, year of study, experience and type of experience, and the training and type of training they have received. The results of this demographic questionnaire were tabulated and compared within the two groups. The final survey tool is attached as Appendix D.

3.4 DATA ANALYSIS

As the research employs a mixed-methods approach, the researcher shall also use a mixed-analysis method in analysing the data sets. Onwuegbuzie and Combs (2010) stated that mixed analysis involves using both quantitative and qualitative analysis techniques in the same research. The analysis might be done either concurrently or sequentially. However, such as in a parallel mixed analysis, results of both sets of data are combined in the data interpretation stage (Onwuegbuzie & Combs, 2010). The purpose of choosing this data analysis is complementary in nature. Greene, Caracelli and Graham (1989), in their identification of the five purposes for mixing quantitative and qualitative data, explained that if complementarity is the purpose for mixed analysis, the researcher aims to elaborate, illustrate, enhance or clarify the findings from one analytical strand to another.

In the same way, the researcher attempts to understand the nature of pre-service general- and special-education teachers’ perceptions by using a mixed-analysis approach. In this particular study, qualitative data gathered from the interview will be analysed using qualitative methods, and quantitative data will be analysed using quantitative methods. Data gathered from both analytical strands will then be integrated in the interpretation results.

3.4.1 Analysis of Interviews

For the qualitative data gathered through the semi-structured interviews, a thematic analysis will be conducted. According to O’Leary (2004), themes can emerge from

engaging with literature, prior experiences of the researcher and the nature of the research question. However, before identifying the themes, it is important to analyse first the gathered data through a systematic process. In the first phase of the study, the researcher familiarized herself with the data gathered, which involved transcribing the data in written form. Secondly, the research gathered initial codes. Saldaña (2009) defined codes in qualitative study as “words or short phrases that symbolically assign a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data (p.3)”. However, he also argues that coding is not only to label data, but also to link them together (Saldaña, 2009).

Following Strauss and Corbin’s (1990) coding methodology, the first phase of this research involves open coding, which was conducted to identify concepts in the data gathered. In this stage, the researcher immersed herself in the data gathered and in coding the data in as many ways as possible. Secondly, axial coding was conducted, where the researcher identified connections between the categories and subcategories using the coding paradigm. The third phase of the research involved searching for themes, including sorting the different codes into potential themes. The fourth phase of the analysis involved reviewing and refining the themes, and the last phase is for defining and naming the themes (Braun & Clarke, 2006).

3.4.2 Analysis of Survey

The second aspect of the research involved conducting statistical treatment of the results of the TAIS. The survey data is analysed by comparing the scores assigned for each item on the questionnaire, which indicates a more positive or negative attitude towards inclusion. To determine whether there is a significant difference between general- and special-education teachers’ perceptions towards inclusion, a two-way t-test is used to compare the mean scores of the two groups. The two-way t-test was chosen even if the means of the two groups are significantly different. Measures of central tendency will also be used to compare the responses of each group.

3.5 THREATS TO VALIDITY AND RELIABILITY

Onwuegbuzie and Johnson (2006) believed that validity in mixed-methods research has yet to be fully explored. However, they argued that because mixed-methods research combines the strengths and weaknesses of quantitative and qualitative research, evaluating the validity of a mixed-method research could be complex. However, they suggested the term “legitimation” to explain validity in mixed research. They explain the problem of legitimation as “the difficulty in finding or making inferences that are credible, trustworthy, dependable, transferable and/or confirmable” (p.52). There are nine types of legitimation identified by Onwuegbuzie and Johnson (2006); for this research, only two types of legitimation will be discussed, as shown below.

3.5.1 Sample Integration Legitimation

According to Onwuegbuzie & Johnson (2006), sample integration legitimation refers to the degree of relationship between the quantitative and qualitative sampling designs, which produces quality meta-inferences. In this type, it is argued that the higher the similarity between the samples of both types of research, the higher the acceptability of the inferences towards the target population (Onwuegbuzie & Johnson, 2006).

In this manner, the researcher attempted to address the issue by including the interviewees in the survey sample as well. However, it is also recognized that because the survey sample was selected randomly, there is lesser similarity between the two samples.

3.5.2 Weakness Minimization Legitimation

Weakness minimization refers to the degree by which the weakness of one approach is compensated for by the strength of the other approach (Onwuegbuzie & Johnson, 2006). It is also argued that mixed research is best in addressing this type of legitimation; the researcher, however, must also consciously assess the degree to which the weakness of one approach is addressed by the other.

In the present research, the research design chosen addresses the issue of weakness minimization legitimation. The weaknesses of the qualitative approach, such as the

generalizability of the target population and the objective measurement of their attitudes, are addressed by the survey. Since a larger and more heterogeneous sample was selected for the survey, it can be said that the inferences are more representative of the target population. Likewise, the survey also provides complementary information to support the interview data. For example, the survey data can show if there is a significant difference between the perceptions of both groups, or if they have more positive or negative attitudes towards inclusion that cannot be concluded from the interview alone.

3.6 ETHICAL CONSIDERATIONS

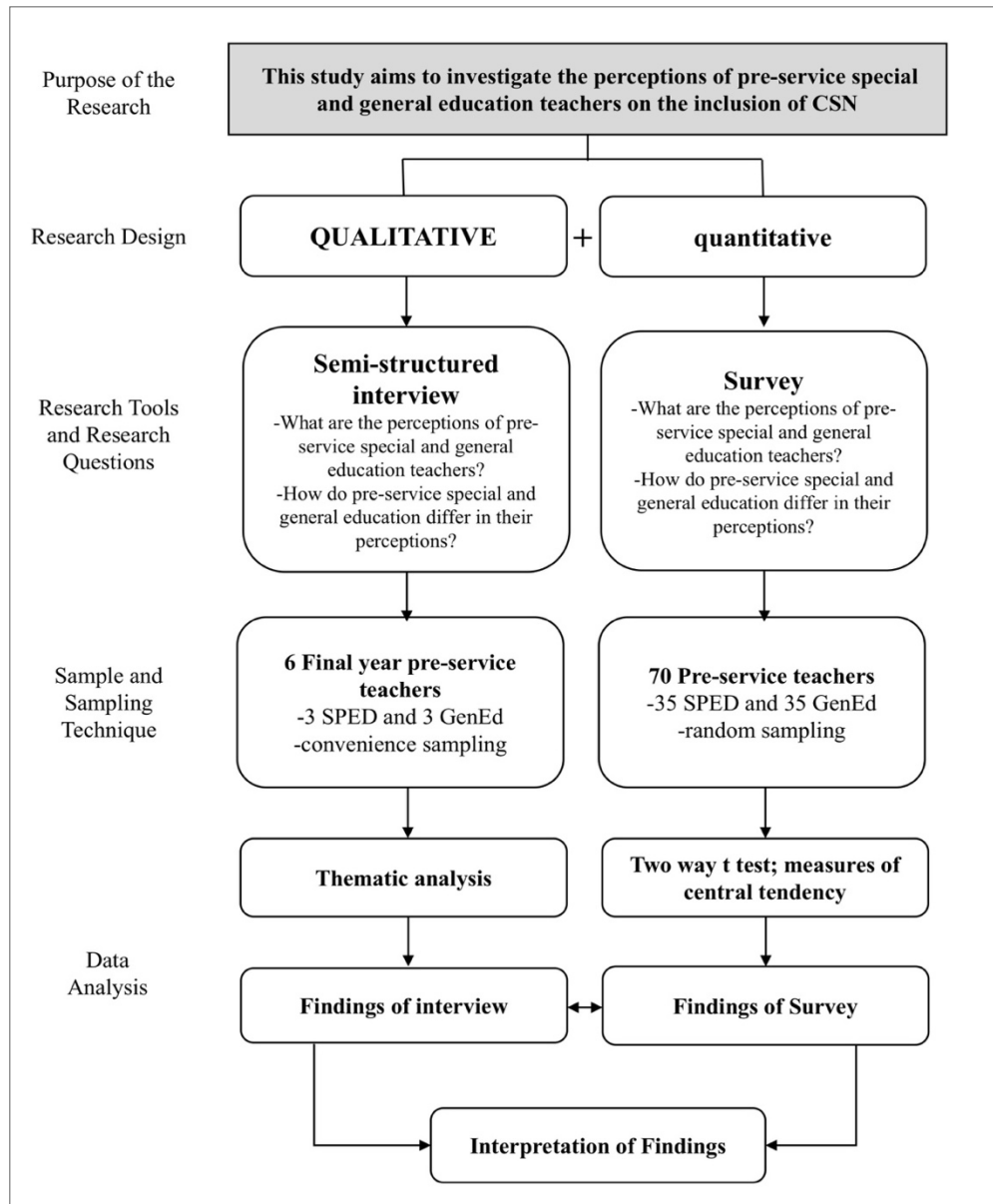
The research study ensures the confidentiality of data gathered through both the surveys and the interviews. All the respondents are assured that participation in the research study is voluntary and that they can withdraw anytime. Participants are also informed beforehand of the nature of the interviews, including the topic, length of interview and method of recording. Interview participants are also asked to sign an informed-consent letter before participating. Lastly, the researcher assures respondents that participating in the study does not bring with it any risk and that fair treatment of participants are ensured.

Permission from school administrators to conduct the study in the College of Education was also obtained by the researcher. Letters of correspondence, the research proposal and the research tools were sent to the dean of the College. Furthermore, professors and instructors were asked beforehand to allow the researcher to conduct the survey.

3.7 SUMMARY OF RESEARCH METHODOLOGY

The research employs a partially mixed concurrent dominant design based on the typology of Johnson and Onwuegbuzie (2004). The samples were pre-service teachers enrolled in the teacher-education program of the University of the Philippines, College of Education. Two approaches were used: semi-structured interviews and survey. Data will be analysed separately and integrated in the interpretation stage. The diagram below shows a summary of the research design and methodology used in this study.

Scheme No. 3: Summary of Research Design and Methodology



Author's own diagram of the research methodology, 2016

4 DATA PRESENTATION AND DISCUSSION

In this chapter, the results of the semi-structured interviews and the survey are presented and analysed. The first part shows the data gathered from the semi-structured interview. Afterwards, the survey data will also be shown.

4.1 FINDINGS OF SEMI-STRUCTURED INTERVIEW

The findings of the interviews were analysed through an open coding process: themes were then extracted from the interviewees' responses.

4.1.1 Sentiments on Experience and Training

The first theme is about pre-service special- (SPED) and general-education (GenEd) teachers' sentiments on their experience and training on including CSN in their classes.

Background of participants' prior experience

All of the participants said that they have had prior experience or interaction with people with special needs. However, majority of their experience were through personal relationships, such as having family members or friends whom they identified as having special needs. When asked about prior teaching experience, majority of the participants mentioned they have had teaching-demonstration classes in the university and one (S3) mentioned having had a tutee suspected of having attention deficit hyperactivity disorder (ADHD). The participants also varied in their opinions when asked to recall their prior experience during the interview:

- *"My close friend was able to learn on his own" (G1)*
- *"I am not sure about my opinion on that (ideal classroom placement) because of my sister's experience" (G3)*
- *"It was uplifting when my tutee who has ADHD would say that she did well on exams" (S3)*

However, participants who do not seem to have a close relationship with people with special needs whom they identified earlier on spoke more generally and did not mention the same experience throughout the interview.

Moreover, the participants also mentioned having both positive and negative experiences as regards the inclusion of people with special needs. However, only two of the participants (G1 and S2) seemed to have had positive experience in an inclusive setting. G1, who has a close friend with autism, talks about how his friend, even without having a SPED teacher around him, was able to learn and graduate with the rest of the group. S2 also shared that he became friends with other students with special needs.

However, majority of the respondents cited their negative experiences more. G1 mentioned experiencing being teased for being friends with a classmate with autism. Other participants talked about their negative experiences in handling CSN in their teacher-education classes.

- *“It was very difficult when we were there. We were not briefed beforehand that there was a child with ADHD but eventually they told us because we really found it difficult. He would lie down on the floor and all the management techniques we know of didn’t work” (G3)*

Other negative experiences cited include not being able to implement behavioural plans (S3) or having students who were hyperactive and always asking questions (G2).

Perceptions on the significance of their experience to their attitude towards inclusion

All the interviewees also agreed that prior experience is important in preparing them for teaching CSN. They mentioned that the lack of exposure could lead to lack of acceptance and understanding of CSN in inclusive classes.

- *“I think it’s important because the more you’re exposed to them, the more you become sensitive to their needs and this is crucial when you are going to teach a classroom with CSN.” (G3)*

- *“If I think about it, for example some of the people I’m doing my practicum with, they don’t have much experience or exposure. I see that they’re not used to it, wondering why the child is like this or what’s happening.” (S1)*

The participants described how their experience benefited them in terms of being more prepared to teach CSN. Majority of the participants believe that it helps them in understanding the needs of CSN, including their behaviour, feelings and needs. The participants also said that their experience gave them insights into the learning styles of CSN, and the extent of their need for additional help. Some pre-service teachers said their experience gave them more confidence in teaching CSN and in helping to lessen the teachers’ anxieties. However, two of the SPED participants (S1 and S3) said their experience helped them but only to the extent of raising their awareness.

Background of participants’ training in handling CSN

The pre-service teachers were also asked about their sentiments towards the training they have received in their program. All the participants interviewed attended at the least EDSP 101: Special Education. The subject is a three-unit foundation course that offers an overview of the programs and services in special education. For the three GenEd majors, only one (G3) attended an additional course, EDSP 102: Learners with Special Needs, which was required for her specific specialization. All the SPED majors meanwhile have at least 12 special-education courses, including EDSP 111, a course on inclusive education. Moreover, only two of the participants (G1 and S2) have attended seminars on the inclusion of CSN.

Although the GenEd and SPED majors differed in the number of courses that they took pertaining to CSN, their description of the courses were similar. Majority of the GenEd majors described EDSP 101, as an awareness course that focused on the history of special education, types of special needs and SPED laws. However, SPED majors said that their courses focused on theories, planning, teaching methods and strategies, assessment and creating Individualized Education Plans (IEP).

Perceptions on the significance of their training

All of the respondents believe that the teaching methods and strategies that were taught to them were particularly helpful in preparing them to teach CSN. Some participants said that classroom and behaviour management will be valuable to their teaching practice, and that practical application and immersion would be more useful than the theories. Two participants, however, said that a theoretical knowledge of special needs is also important:

- *“I was talking to another teacher in the school, she said you have to think of the theory to find out how you’re going to address the needs of the child.” (S1)*
- *“I think the theoretical also follows since the theories also help the methods with which you address the students’ needs and without the theories, we would not be able to apply strategies properly.” (S2)*

When asked if a course on inclusive education is important, all the participants agreed that it is necessary and relevant. However, they differed in their opinion on whether it should be integrated within the other courses or treated as a separate course. All the participants agreed that having training on teaching CSN is beneficial, saying that it helped broaden their point of view and raise their awareness of the students’ needs.

- *“Right now, the other students share that they have one child with ADHD in class and all of them are scared to handle that class. I think if beforehand they’ve had prior exposure and training, they won’t be as scared” (G3)*
- *“They might not see the importance now because they don’t have CSN in the school but when they go out, they will need it eventually.” (S2)*

They also believe that it is essential to have this kind of knowledge regardless of their majors. All of them believe that training on CSN should be required for all education students.

Concerns about training

Student teachers shared their concerns about the training they have received. All the GenEd majors believe that having introductory courses, such as EDSP 101 and EDSP 102, should not be considered training, as the content of these courses were mostly on awareness and theoretical knowledge. They argue that these courses are not sufficient for them to become trained in teaching CSN. On the other hand, none of the SPED majors feel that they have not been trained, but only two SPED majors believe that the training they have received is sufficient. The rest said that the training they received so far is lacking:

- *“No, (it is not enough) given that the course I took is just an introduction. We are lacking in methodologies on how to handle them.” (G2)*
- *“I feel that I’m not as prepared. Even now when I think about it, I forgot all about what I learned in EDSP 101 and 102, for example because it has been a long time. If that’s the case, then I think there’s something missing” (G3)*
- *“No, I think it’s not enough because I think there should be an improvement, more methods. There should be more practical uses.” (S2)*

Majority of the participants believe that there are areas for improvement in in their teacher-training program.

- *“I also think that practical application would be better. Experience can never beat theory” (G1)*
- *“I think that what is lacking is more exposure to CSN and how to handle them in the classroom.” (G3)*
- *“I think there should also be follow up of how it (IEP) is implemented. We didn’t see the application of it whether it is effective.” (S1)*
- *“We just looked at the history, how it’s being developed, how it’s implemented now and what we plan to do in case we have a CSN in the*

classroom. However, we weren't taught how. There were some cases but there should be more and there should be more field observations.” (S2)

Most believe that practical experience and immersion should be added to the teacher-education curriculum. They also mentioned that more strategies on classroom and behaviour management should be included.

4.1.2 Beliefs about Inclusion

The next main theme of the findings had to do with the pre-service teachers' beliefs about inclusion, focusing on how they define and understand inclusion, its benefits and barriers, and their concerns and sentiments on how an inclusive classroom can be achieved.

4.1.2.1 Defining and Understanding Inclusion

In this section, the participants' perception on how they defined and understood inclusion is presented. Moreover, the participants' belief on different aspects of inclusion such as classroom placement, teachers' roles, and the perceived benefits and barriers to achieving inclusion are explained.

Inclusion vs. Integration and Mainstreaming

The participants' views on how they define inclusion was analysed from their responses throughout the interview. Although they were not asked directly about how they define inclusion, their responses to the different questions reflect their understanding of the field. Majority of the participants seemed to have a clear grasp of who is referred to as CSN. It is also important to note that the participants to agree on the conditional placement of a CSN in the GenEd classroom. All the participants mentioned, during different parts of the interview, how a CSN is able to “cope” or “catch up” with their peers in the mainstream classroom, even as they had different definitions of what it means to cope with peers. Others also view inclusion to refer to when the child is “accustomed to” or “ready” for this setting. Only one (S3) mentioned that CSN have to be with their age peers. They also elaborated on the different factors that they think should be considered when placing a CSN in a mainstream classroom, such as the child's academic and social skills.

- *“I think the child should not be too distractive with himself/herself in the class, if he or she will be staying in the mainstream classroom” (G3)*
- *“Generally, I think maybe as long as you’re not low-functioning, you can be included in the mainstream classroom” (S1)*

Type of Disability and Severity of Needs

Additionally, one factor that stood out from the findings was that the respondents also take into consideration the type of disability of a child. All of them agree that CSN with physical disability can be accommodated in the mainstream school, provided that they are not cognitively delayed. However, they have differing opinions on intellectual disabilities (ID) and autism. Majority of the SPED majors believe that students with ID, as long as it is not too severe, can function properly in inclusive settings and that providing shadow teachers should be enough support. Most of them expressed concern on the possibility of including students with ID. Most of the interviewed SPED majors believe that the best placement for children with severe autism is at SPED centres. GenEd majors did not mention their perceptions on children with autism. All the respondents agreed that the severity of children’s needs is an important factor when placing them in GenEd classrooms.

Apart from these, others also mentioned external factors, such as the ability of the mainstream classroom teachers to teach CSN and parental choice. Majority of the respondents agreed that the choice of the parents and the child should be considered in the placement of a child, provided that they are given sufficient knowledge to make decisions

Inclusion as a fundamental right and a necessity

The participants hold different opinions on whether inclusive education is a child’s fundamental right. When they were asked about whether it is a child’s right to stay in an inclusive classroom and whether placing them in special schools violates this right, majority of the respondents disagreed. Only one participant had an absolute belief that CSN should be placed in GenEd classrooms:

- *“Yes, I agree it is a violation of their right. Special schools in my opinion, in theory should accommodate for the learners’ needs. However, what happens is that they become segregated and isolated from society.” (G1)*
- *“They will learn best in a school where teachers are trained specifically for their needs” (G2)*

The other respondents expressed that it is not an absolute right, mainly because inclusive settings, as they see them, may not be able to address the child’s needs.

- *“I don’t think it is a violation of their right to be in a segregated class because we have to address their needs accordingly.” (S1)*

The participants had an agreement that ample understanding of inclusion is a necessity. The most common reason among the interviewees is that they believe that having CSN in a general classroom is inevitable. Some cited that existing laws insist on inclusion. Others expressed their belief that segregation is not beneficial in the long run, and that it has detrimental effects on CSN. They believe that the inclusion of CSN in a GenEd classroom helps prepare the students for the real world.

Ideal classroom placement and teachers’ roles

Majority of the participants seemed hesitant to state that mainstream classroom is always the ideal classroom placement of CSN. While only one believes that special schools are the ideal classroom placement for them, most of the respondents believe such depends on different factors. Most of the participants believe that GenEd classrooms are ideal, provided that they can provide for all the needs of the children in the class. They elaborate that GenEd classrooms can be ideal if different forms of necessary support, such as shadow teachers and SPED experts, are present to help address the child’s needs. It was also mentioned that if the GenEd classroom cannot accommodate the needs of CSN, special schools should be a more appropriate and ideal placement.

All the participants agree that SPED teachers have to provide more specialized and supplementary support in the classroom as needed. However, most of the SPED

majority looked at the SPED teachers' role as limited only to responding to the needs of CSN, but did not mention their role towards the rest of the class.

- *“As a SPED teacher, you also can't overstep boundaries. She is the lead teacher of the class so you're there to support her and the child.” (S1)*
- *“For example, the lesson is too fast, the SPED teacher can make it slower or easier to understand so that the CSN would not have much difficulty” (S2)*
- *“As a shadow teacher, I have to sort of borrow the attention of the child to pay attention to me first, (to) let's make it easier for (him/her) to understand (the lesson)” (S3)*

All the respondents believe that content teaching should be the main responsibility of the GenEd teacher. However, there is not an agreed opinion on providing accommodations. Others believe that GenEd teachers should also provide more general accommodations and that SPED teachers only come in when the GenEd teachers can no longer support the child's needs. Others believe that it is the sole responsibility of the SPED teacher, while some argue that they should work hand in hand. Majority of the participants also agreed that both GenEd and SPED teachers are responsible for the child's socialization in the class.

Benefits of inclusion

The participants are clear on their sentiments about the benefits of inclusion. Majority of them believe it is beneficial to the CSN, citing that inclusion is good for the socio-emotional well-being of children. They also cite think that CSN's social skills can be improved in an inclusive classroom. The participants also believe that inclusion benefits other children as they learn accept differences between and among them. They believe that inclusion addresses issues of marginalization of and stigma against CSN. Most of them also believe that inclusive education likewise benefits teachers, who become better prepared and knowledgeable. Lastly, all of them think that inclusive education eventually benefits everyone and will lead to a better community.

Barriers to inclusion

Participants also had a shared opinion on barriers to inclusion. One main barrier that they think is critical is the teachers' lack of awareness of and lack of training for inclusion. They believe the current reality is that teachers at SPED schools are better trained and that it may take time for GenEd schools to be ready for inclusion. Moreover, they think that the educational situation in the country is in itself a barrier, citing the present classroom size and the lack of trained teachers in the Philippines that make it difficult for inclusion to be realized.

4.1.2.2 Concerns and Views about the Feasibility of Inclusion

In this section, the participants' concerns about inclusion are described and evaluated. This includes the participants' workload, child-related, and other concerns pertaining to the success of inclusion. Furthermore, their views on how inclusion can be achieved in the Philippine context are also investigated.

Workload Concerns

Pre-service teachers shared their concern about the impact of inclusion to teachers' workload. All the GenEd majors believe that including CSN in the GenEd classroom would mean a heavier workload.

- *“It will be heavier but it is necessary” (G1)*
- *“Without SPED schools, teachers will suffer because there is no training” (G2)*
- *“It would be heavier since more factors should be considered.” (G3)*

However, the SPED majors' opinions are mixed as some believe inclusion of CSN in the classroom would not change the GenEd teacher's workload.

- *“I think it doesn't necessarily have to change for the GenEd teacher” (S1)*
- *“In an ideal school it wouldn't matter much because they are given training. I assume that they are able to accommodate the student but if they couldn't then there will be a SPED teacher or coordinator who would help them” (S2)*

The participants agreed that teachers should not be asked to include CSN without the appropriate training and support; they think that such will be counter-productive.

Child-Related Concerns

The respondents also expressed some of their child-related concerns. Firstly, they worry that the child will not be able to meet the academic competencies required. One participant (S2) is also concerned that the teaching strategies or lesson flow will not match the child's needs and current level.

Participants are also concerned about the child's socio-emotional well-being. Some are anxious about their ability to get along with their peers or participate in the GenEd classroom. The issue of bullying was also asked.

- *“That (bullying) is one possibility but maybe to address that, the students should also be aware of the diversity of people and students.” (G2)*
- *“I think that if they are exposed at a very young age, they have friends with special needs, bullying doesn't become a problem.” (S1)*

Most of the participants believe that bullying can happen to CSN in GenEd classrooms. However, some also believe that inclusion may help to eliminate bullying.

Other Concerns

Lastly, some of the participants also expressed other concerns, such as over the children's parents and the school environment. While many think that the parents of CSN are not of utmost concern at this point, SPED majors offered different experiences on parental belief and involvement.

- *“The parent of the kid now is still in denial so I think that's one of the challenges. I don't know how to approach if they are in denial” (S1)*
- *“Support of the parents of CSN is needed because it will be very difficult to continue progress if the parents do not check on it at home.” (S3)*

Additionally, most of the SPED majors consider collaborating with the GenEd teacher a concern. They said that they need to have a good working relationship with the GenEd teacher in the class, and that it is important that they understand the need for modifications.

Perceptions on achieving inclusion

The pre-service teachers interviewed talked about the support they believe is needed to be able for the inclusion of CSN. First, the physical accessibility of schools is necessary. They also believe that materials, such as braille machines, and interpreters must be provided, depending on the child's needs. They also think that SPED experts and shadow teachers working in regular schools should provide the necessary support. All respondents agreed that teacher training is necessary. Lastly, they think that for inclusion to be successful, it is necessary to have the support of the other members of the community, including the parents of children without special needs.

The last theme of the interview is about the interviewees' perceptions on the possibility of implementing IE in the Philippines. While all the respondents believe it is possible, they also think it would take a lot of changes for it to happen. In addition to implementing better training for teachers as previously mentioned, they argue there should also be better legislation to support IE. They believe that although more laws should be created, implementation and enforcement are key aspects as well. Further, awareness about IE among the general public should also be prioritized. They believe that the media, teachers, organizations, government officials and families must work together to achieve awareness of IE.

4.2 FINDINGS OF SURVEY

Findings from the survey tool are tabulated and presented in each subsequent themes. Two-way t-tests were used to compare the mean scores of GenEd and SPED majors for each statement in the TAIS.

4.2.1 Experience of special- and general- education majors

In the first part of the survey, the respondents were asked if they have had prior experience with CSN. Moreover, they were asked to identify what kind of

experience they have had. Table 2 show there were more SPED majors who have had prior experience with CSN than GenEd Majors.

Table No. 2: SPED and GenEd Majors with Prior Experience

	SPED Majors with Experience with CSN	GenEd Majors with Experience with CSN
N	32	13
Total N	35	35

Author's own analysis, 2016

Table 2 illustrates that majority of the SPED majors have had prior experience with CSN compared to only about half of the GenEd majors. Furthermore, there was also some differences between the type of experience of GenEd and SPED majors, as shown in Table 3.

Table No. 3: Type of Experience of SPED and GenEd Majors

Type of Experience	Family member with special needs	Friends/Acquaintance with special needs	Student with special needs	Others
SPED majors	13	16	18	5
GenEd majors	4	7	2	2

Author's own analysis, 2016

In Table 3, it can be seen that majority of the GenEd majors who have had prior experience with CSN said that they know other people with special needs personally. However, the SPED majors' most common response is having prior teaching experience with students with special needs.

4.2.2 Training of special- and general- education majors

Aside from having different experiences, the results of the survey also show that GenEd and SPED majors have had different training on teaching CSN.

Table No. 4: SPED and GenEd majors with training on teaching CSN

	SPED majors with training	GenEd majors with training
N	23	11
Total N	35	35

Author's own analysis, 2016

Table 4 shows that more SPED majors have received training on teaching CSN than GenEd majors. Also, there were differences between the type of training that the two groups have had.

Table 5: Type of training of SPED and GenEd majors

Type of Training	Seminar	Teaching course	Others
SPED majors	11	20	0
GenEd majors	1	10	0

Author's own analysis, 2016

Table 5 illustrates that attending a course on teaching CSN was the most frequent type of experience of the GenEd and SPED majors. However, there were more SPED majors who have attended seminars on the subject than GenEd majors.

4.2.3 TAIS Scores

In this part of the survey, the responses of the pre-service GenEd and SPED teachers were tallied and compared. The overall scores of both groups were evaluated using

a t-test analysis to determine whether or not there is a significant difference between the two groups' perceptions.

4.2.3.1 Comparison of overall score

The overall score of the two groups were tabulated and evaluated by describing their mean scores. The maximum score that can be achieved for the ten-item survey is 40. Afterwards, a t-test analysis was used to determine if the scores were significantly different.

Table No. 6: Overall mean scores of SPED and GenEd majors

	Overall mean scores
SPED	28.1429
GenEd	24.4857
t-statistic df=68	4.3044

Author's own analysis, 2016

Table 6 shows that the SPED majors have a higher average score in the TAIS compare with GenEd majors. SPED majors have a mean score of 28.1429, while GenEd majors have 24.4857. The t-test result also shows that the null hypothesis, that the difference between the two means is zero, can be rejected. The 4.3044 value obtained is well beyond the 2.6501 at $\alpha = 0.005$ with $df = 68$.

4.2.3.2 Comparison of survey responses

The results of the TAIS were divided into four different themes. However, each statement will be analysed separately to find out if there is a significant difference between the responses of the GenEd and SPED majors.

Type of disability

There are three statements in the TAIS that pertain to pre-service teachers' perceptions on the type of disability and inclusion.

- ***Statement 2: The education of children with emotional and behavioural disorders should be arranged in mainstream classrooms with the provision of adequate support.***

Table No. 7: Analysis of responses for statement 2

Response	Strongly Disagree	Disagree	Agree	Strongly Agree	Mode	Mean
SPED	0	2	21	12	Agree	3.2857
GENED	0	6	20	9	Agree	3.0857
t-statistic df=68		1.3560				

Author's own analysis, 2016

For statement two, the findings show that majority of GenEd and SPED majors' responses fall under the "strongly agree" and "agree" category. Upon analysing the t-test result, the null hypothesis, that the difference between the two means are equal to zero, can be rejected at an α of 0.1; analysis shows that at an α of 0.05 means the null hypothesis can be retained. The weak rejection of the null hypothesis can be attributed to both groups having a similar mode (agree), but the contrast between the two groups can be attributed to more SPED majors agreeing strongly to the statement.

- ***Statement 4: Children with physical impairments (visual, hearing, mobility etc.) should be admitted in mainstream classrooms with adequate support.***

Table No. 8: Analysis of responses for statement 4

Response	Strongly Disagree	Disagree	Agree	Strongly Agree	Mode	Mean
SPED	0	2	12	21	Strongly Agree	3.5429
GENED	1	5	20	9	Agree	3.0571
t-statistic df=68		3.0304				

Author's own analysis, 2016

Table 8 illustrates the responses of GenEd and SPED majors towards children with physical impairments. Although both groups agree with the inclusion of children with physical impairments in the classroom, results of the t-test show that the difference between the means of both groups is statistically significant. This could be attributed to the fact that both groups have a different mode where majority of the SPED majors strongly agreed with the statement whereas majority of the GenEd majors' said they agree with it. Statement 9: The education of children with less severe disabilities such as ADHD and learning disability should be in a regular classroom.

- ***Statement 9: The education of children with less severe disabilities such as ADHD and learning disability should be in a regular classroom.***

Table No. 9: Analysis of responses for statement 9

Response	Strongly Disagree	Disagree	Agree	Strongly Agree	Mode	Mean
SPED	2	2	14	17	Strongly Agree	3.3143
GENED	1	13	15	6	Agree	2.74289
t-statistic df=68		2.9640				

Author's own analysis, 2016

Table 9 shows the responses of GenEd and SPED majors to the inclusion of children with less severe disabilities, such as learning disabilities and ADHD. Data show that majority of the SPED majors' responses fall under the "strongly agree" and "agree" category. However, a number of GenEd majors' responses also fall under the "disagree" category. Applying the t-test confirms that the mean responses of both groups are statistically different.

Right of a child

The third item in TAIS pertains to inclusion as a fundamental right of the child.

- ***Statement 3: It is the right of a child with special educational needs to get into a special education classroom.***

Table No. 10: Analysis of Responses for Statement 3

Response	Strongly Disagree	Disagree	Agree	Strongly Agree	Mode	Mean
SPED	0	0	21	14	Agree	1.6
GENED	1	2	13	19	Strongly Agree	1.5714
t-statistic df=68		0.1898				

Author's own analysis, 2016

In this statement, the participants were asked if they think it is the right of CSN to be placed in a SPED classroom. Majority of the responses of both groups are in the “agree” and “strongly agree” categories. However, data also show that majority of the responses from GenEd majors fall under the “strongly agree” category. Despite the difference in the opinion of both groups, the t-test results show there is no significant difference between the means of SPED and GenEd majors’ responses.

Workload concerns

The next theme is about the pre-service teachers’ attitudes towards inclusion and its effects on the workload of a teacher.

- ***Statement 5: Teachers' workload should not be increased by compelling them to accept children with special educational needs in their classrooms.***

Table 11: Analysis of responses for statement 5

Response	Strongly Disagree	Disagree	Agree	Strongly Agree	Mode	Mean
SPED	5	22	8	0	Disagree	2.9143
GENED	3	16	15	1	Disagree	2.6
t-statistic df=68		2.0083				

Author's own analysis, 2016

The participants were asked if they agree that teachers' workload should not be increased by asking them to accept CSN in their classroom. Data presented in Table 11 show that both groups' responses fall under the "disagree" category. However, the t-test also shows that there is a significant difference between the groups' mean scores. This can be attributed to the fact that there were also more responses from the GenEd group that fall under the "agree" category, compared with the responses of the SPED group.

- ***Statement 8: Integrated children with special educational needs create extra work for teachers in mainstream classrooms.***

Table 12: Analysis of responses for statement 8

Response	Strongly Disagree	Disagree	Agree	Strongly Agree	Mode	Mean
SPED	1	13	18	3	Agree	2.3429
GENED	2	11	19	3	Agree	2.3429
t-statistic df=68		0				

Author's own analysis, 2016

In statement eight, the participants were asked as if they agree or disagree with the opinion that integrating CSN creates additional work for mainstream teachers. Both groups have very similar distribution of responses, as both groups' responses fall in the "disagree" and "agree" categories. In addition, the means of both groups were equal.

Ideal classroom placement

The last theme from the survey is on the participants' beliefs on classroom placement and inclusion.

- ***Statement 1: Children with special educational needs learn best in their own special education classes where they have specially trained teachers.***

Table 13: Analysis of responses for statement 1

Response	Strongly Disagree	Disagree	Agree	Strongly Agree	Mode	Mean
SPED	0	16	17	2	Agree	2.4
GENED	1	5	17	12	Agree	1.8571
t-statistic df=68		3.2755				

Author's own analysis, 2016

The results shown in Table 13 shows that the majority from both groups agreed with the statement. However, more SPED majors disagreed with the perception that SPED classes are the best place for CSN to learn. The GenEd majors' responses fall under the "agree" and "strongly agree" categories. Applying the t-test shows there is a significant difference between the groups' mean responses.

- ***Statement 6: The best result is achieved if each child with special educational needs is placed in a special education classroom that best suits him/her.***

Table 14: Analysis of responses for statement 6

Response	Strongly Disagree	Disagree	Agree	Strongly Agree	Mode	Mean
SPED	4	11	14	6	Agree	2.3714
GENED	1	6	17	11	Agree	1.9143
t-statistic df=68		2.2548				

Author's own analysis, 2016

The participants were also asked if they agree that the best results are achieved when CSN are placed in SPED classes that best suit them. Most of the responses from both groups fall under the "agree" category, but there were also more GenEd majors whose responses are under the "strongly agree" category. In comparison,

responses from more SPED participants fall under the “disagree” category. Furthermore, t-test shows that there is a significant difference between the responses of the two groups.

- ***Statement 7: The education of students with special educational needs should be done as much as possible in mainstream classrooms.***

Table 15: Analysis of responses for statement 7

Response	Strongly Disagree	Disagree	Agree	Strongly Agree	Mode	Mean
SPED	7	3	16	9	Agree	2.7714
GENED	5	15	12	3	Disagree	2.3714
t-statistic df=68		1.7476				

Author's own analysis, 2016

In statement seven, the respondents were asked if they think that the education of CSN should be done as much as possible in a mainstream classroom. Analysis of the distribution responses shows that majority of the SPED majors' responses fall under the “strongly agree” and “agree” category. Contrastingly, the GenEd majors' responses were predominantly under the “disagree” and “agree” category. Further analysis shows that the means are still significantly different beyond an α of 0.05, but not at an α of 0.025.

- ***Statement 10: The learning of children with special educational needs can be effectively supported in mainstream classrooms as well.***

Table 16: Analysis of responses for statement 10

Response	Strongly Disagree	Disagree	Agree	Strongly Agree	Mode	Mean
SPED	0	2	10	23	Strongly Agree	3.6
GENED	3	5	18	9	Agree	2.9429
t-statistic df=68		3.6637				

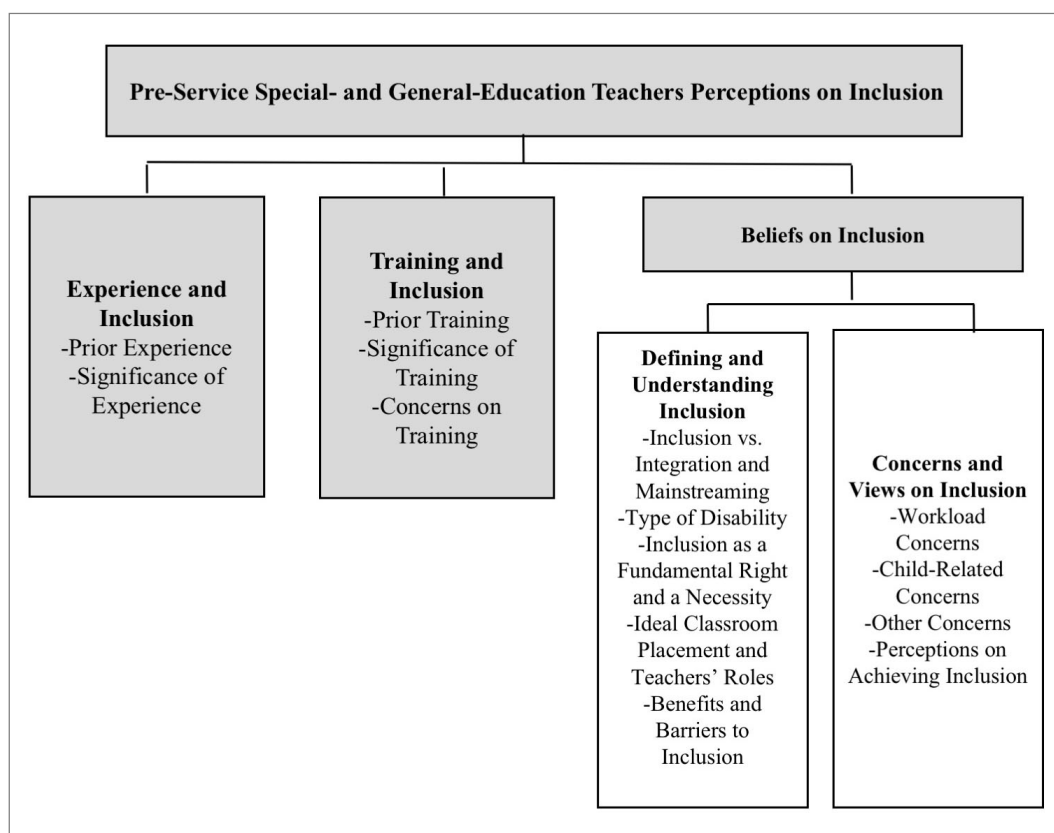
Author's own analysis, 2016

In the last item of the survey, participants were asked if they believe that CSN's learning can be supported in mainstream classrooms. As can be seen in Table 16, majority of the SPED majors' responses fall under the "strongly agree" and "agree" category. GenEd majors' responses meanwhile fall under the "agree" and "disagree" categories. Results of the t-test show that there is a significant difference between the attitudes of both groups of pre-service teachers.

5 SUMMARY AND DISCUSSION OF FINDINGS

In this section, the findings of both the interview and the data will be discussed, interpreted and analysed together. The results of the research will be discussed in relation to the findings of previous research studies. The analysis will also be presented in the different themes, similar to the presentation of the analysis of the interviews. The diagram below shows how the data will be discussed according to different themes emerging from the survey and interview.

Scheme No. 4: Summary of Findings



Author's own diagram of the research findings, 2016

5.1 EXPERIENCE AND INCLUSION

Both the interview and survey data show that majority of the pre-service teachers in the Philippines have had prior experience with people with special needs. However, in the survey data, more SPED majors have prior experience compared to GenEd majors. This was in contrast with the interview, where all the participants had prior experience with people with special needs regardless of their majors.

While this observation can be due to the difference in sampling techniques used, it can also show that those who have had prior experience were more willing to participate in the interview. However, this conclusion cannot be determined from the present data and would need further investigation.

There were also similarities between the type of experience of interviewees and survey participants. In both types of data, knowing other people with special needs was the most common experience. Prior experience with people with special needs was found to be a crucial aspect on teacher perceptions. Barnes & Gaines (2015) and Sharma et al (2003) concluded in their respective studies that experience had a positive influence on the teachers' perceptions. In relation to these studies, the present study also shows that SPED majors have a more positive attitude towards inclusion based on the TAIS scale, and the significance of the difference between the groups is relevant. However, since the present study does not test for the correlation between pre-service teachers with prior experience and scores on the TAIS, it can only be assumed that experience may possibly be a factor.

Additionally, the interview data also show that student teachers are in agreement that experience is significant to teacher perceptions. This result was similar to Sharma et al (2007) and Sharma et al (2003)'s findings in other countries, which showed that majority of pre-service teachers also believe that prior experience fosters positive attitudes. Other research also shows that the type of experience with CSN can also influence teachers' attitudes positively (Hobbs & Westling, Leatherman & Nieyemer, 2005). While the results of the survey cannot support this finding, analysis of the interview shows that this might also be the case with Filipino student-teachers. One participant who had a positive experience of having a classmate with special needs in the general education classroom holds the most positive about inclusion. Contrastingly, a participant who mentioned having a negative experience with inclusive settings was hesitant to say that inclusive settings are the best placement for CSN. However, as the data of the interviews are limited, this observation cannot be said about the general population, but can be investigated further in future studies.

5.2 TRAINING AND INCLUSION

The second aspect describes student teachers' perceptions on training and inclusion. Survey data show that there were more SPED majors who have had prior training than GenEd majors. Previous research studies on the topic illustrate the importance of training in forming teacher perceptions (de Boer et al, 2013; Avramidis et al, 2000b, Charley, 2015). The findings of the studies of Secer (2010) and Campbell et al (2003) reveal that having training significantly results in developing a more positive attitude towards inclusion. This might also explain why GenEd majors have a lower TAIS score, as fewer participants in the group have received training. But as this the research does not test for the correlation of pre-service teachers who has had training and their overall TAIS score, this phenomenon can be also be explored further.

Moreover, analysis of the interview data also shows more in-depth information about the participants' beliefs on training and inclusion. In the interview, it was found that GenEd and SPED majors alike consider training to be crucial to the success of the inclusion agenda. This was similar to previous studies done in other contexts (Sharma et al, 2007, Loreman et al, 2007, Sharma et al, 2003). However, it was also revealed that there is a great disparity between the type of training received by GenEd and SPED majors. GenEd majors have fewer courses on teaching CSN, and are not required to take a course on inclusive education, unlike SPED majors. These findings can be crucial, as Shade and Stewart (2001) concluded in their study that a single course on inclusion improved the attitudes of student-teachers, regardless of their majors. Therefore, the fact that the only inclusion course available in the college is not required for all may have an impact on the student-teachers' perceptions.

It was also interesting to note that the GenEd majors do not consider the required subjects they have taken as training for teaching CSN. These findings could have substantial implications on teacher-education courses currently offered by the university. Analysis of the interview also shows that majority of the respondents feel that their training is insufficient to enable them to teach in an inclusive classroom. The same findings were noted by Sharma et al (2007) in three of the

four countries they surveyed, where pre-service teachers are also concerned about their lack of skills. Similar to other studies conducted (Avramidis et al, 2000b; Beacham & Rouse, 2012), it was found that knowledge of strategies and having practical experience are significant aspects of training. Interviewees of the current study mentioned that these aspects should be added to the present teacher-education curriculum.

5.3 BELIEFS ON INCLUSION

In this section, the different beliefs of the student teachers regarding the different aspects of inclusion including its definition and how it should be implemented is presented. Furthermore, the different factors that may be significant to their perceptions are presented and analysed.

5.3.1 Defining and Understanding Inclusion

The findings are analysed into the different sub-themes that have emerged from the data including how participants define and understand inclusion. Data gathered from the survey and the interviews are compared and related to provide a more in-depth analysis.

Inclusion vs. Integration and Mainstreaming

Data gathered from the interview reflects that majority of the respondents understand inclusion largely as the integration of CSN in the regular classroom. This is based on the participants' statements about the child "coping" or being able to "catch up" with his/her peers, instead of addressing the barriers surrounding the child. There was also no difference as to how SPED and GenEd majors defined inclusion, despite the fact that all the SPED majors interviewed attended a course on inclusive education. Similar observations were made among educational leaders across the Philippines (Bustos et al, 2014b). In their findings, participants would often use the terms "integration" and "mainstreaming" interchangeably. Muega (2016) also found that inclusive teachers, school administrators and parents of CSN believe IE has to do with the kind of education that embraces diversity and addresses the individuals' needs.

However, as Muega (2016) also argued, participants in their study are unsure of the accuracy and acceptability of their definition of IE. These findings seem to show that the differences in the definition of “inclusion”, “mainstreaming” and integration are still unclear among various groups in the education sector, including pre-service teachers. This is not surprising as there is also a lack of definition by the Department of Education and in national legislation (Bustos et al, 2014b). Additionally, the lack of training on IE among teachers may also be a contributing factor to the lack of clarity. This is echoed by other studies in other contexts, which showed that pre-service teachers’ concept of IE is problematic and that teacher-training courses do not take into account their perceptions, including their beliefs and attitudes (Forlin, Earle, Sharma & Loreman, 2011). Therefore, the findings on how Filipino pre-service teachers define “inclusion” may also be identified as problematic, and that the IE course currently offered does not seem to be sufficient in addressing this misconception.

Type of disability

One important element in the inclusion of CSN is the type and degree of disability. Prior research shows that students with EBD are the most common cause of concern among teachers (Avramidis et al, 200b; 2007; Orr, 2009). In the interview, however, the inclusion of students with ID and autism were mentioned by the participants as a cause of concern. The survey data also shows that majority of the respondents agreed with the statement about including children with EBD (Table 7). There is, however, also a weak rejection that the difference between SPED and GenEd majors’ perceptions were significant. The differences among the student-teachers’ concern over the CSN’s types of disabilities could be because of the educational situation in the Philippines. In the Philippines, children with ID and autism are not commonly included in general education classrooms. However, there is no sufficient data to support this conclusion, so there should be more thorough investigation of this issue in the future.

There were also similar findings between the participants’ perceptions on including children with physical disabilities. In both the survey (Table 8) and the interview, participants were positive about the inclusion of children with physical disabilities.

This was similar to findings in other countries which showed that pre-service teachers were mostly positive about including children with academic and physical disabilities (Loreman et al, 2007) In the present study, the interviewees also mentioned that physical accessibility of schools should be prioritized.

Inclusion as a Fundamental Right and a Necessity

The research shows that pre-service teachers have different opinions on whether or not inclusion in a general-education classroom is a fundamental right of the child. Data from the survey (Table 10) show that both groups agree that it is the right of CSN to have access to SPED classrooms. However, the interview data showed more variance in opinion. Interviewees seemed more cautious to say that segregated placements violate the children's right to inclusion, saying that inclusive settings may not always address the child's needs.

Although there is limited data to explain this phenomenon, the lack of legislation supporting inclusion as a right in the Philippines could potentially be a factor. Sharma, Forlin, Deppeler & Guang-xue (2013) argue that while many Asian countries have adopted the inclusion policy based on a human-rights perspective, issues on implementation remain to be addressed. This could explain why pre-service teachers are also hesitant to advocate for full inclusion. Bowman (1986) also believed that the larger scope of segregated educational placements in a country can be associated with negative attitudes towards inclusion. Similarly, in the Philippines, majority of educational placements for children with disabilities are in special classes in regular schools, compared to only a few integrated or mainstreamed program (Ebol, n.d.).

Ideal classroom placement and teachers' Roles

Majority of the interviewees and survey participants agree that SPED classes or schools may be able to provide the best education for CSN. In statements one and six in the survey (Table 13 and 14), majority from both groups said they agree that SPED classrooms are the best placements. However, a significant number of SPED majors also disagreed with the statement. The findings of the interview show majority of the participants were hesitant to say that mainstream classroom is always the ideal placement. They argue that it is largely dependent on whether the

school can provide for and accommodate the children's needs. Similarly, Saloviita & Schaffus (2016) also noted that teachers' beliefs on classroom placement are dependent on such factors as strong legislation and adequate teacher support. In the Philippines, it also is understandable why pre-service teachers are hesitant about inclusion. Muega (2016) argued that the educational situation in the Philippines – large class sizes, a lack of support and inadequate training – are barriers to teachers' developing positive perceptions on inclusion.

Data gathered from the interviews suggest that the perceptions of pre-service teachers on the role of SPED and GenEd teachers can be described as the typical division of roles. Ripley (1997), however, argues that GenEd teachers are traditionally in charge of the general curriculum, while SPED teachers provide the accommodations to match the special needs of the students. However, she also argues that a collaborative model of teaching is more beneficial to CSN and their peers. Nevertheless, pre-service teachers are not aware of this model, based on their responses. It can also be that they were not given sufficient training or practice on collaborative teaching, given their current school placement. Ripley (1997) says that collaboration should also be part of teacher-training programs. Katsafanas (2006) also believes it is essential to clearly define the roles of each teacher in the classroom, and that opportunities for collaboration should be given importance.

Benefits of and barriers to inclusion

The results of the interviews reveal the pre-service teachers look at inclusion as beneficial to both CSN and the other students. Moreover, they believe that IE addresses issues of exclusion and marginalization. The participants also identified barriers to inclusion, such as the lack of training and the prevailing educational situation in the country. The limited studies on teachers' perceptions on inclusion in the Philippines also point to the same benefits and barriers. Bustos et al (2014b) found that educators believe that inclusion directly relates to equality and positively impacts the lives of learners. Similarly, Muega (2016) found that a lack of knowledge, insufficient training and the dire educational situation in the country hinder the success of the inclusion agenda.

5.3.2 Concerns and Views about Inclusion

This section of the findings shows the participants' concerns and views on the feasibility of inclusion in the Philippines. The data gathered from both the interview and survey are examined according to the different sub-themes that emerged.

Workload concerns

Majority of the interviewees believe that including CSN will result in a heavier workload for teachers. Similarly, the survey data (Table 11 and Table 12) show that both groups also believe that integrating children would create additional work. Perceptions on the impact of inclusion to the teachers' workload are seen as a factor in their attitudes (Mangope et al, 2013). In-service and pre-service teachers in Germany, for example, had the same belief, and the lack of available support for teachers was also identified as a potential reason for the teachers' negative attitudes (Saloviita & Schaffus, 2016). The same can also be said of the Filipino teachers, where a lack of training and available support for teachers leave them more concerned about how inclusion might impact their workload.

Child-related Concerns

In the interview, CSN's academic and socio-emotional well-being was the primary concern of the participants. Studies in Asian countries show a similar concern for CSN's academic achievement (Yadas et al, 2015; Sharma et al, 2007). The academic skills of CSN appear to be a concern amongst Asian cultures because of the highly competitive academic standards in the region (Sharma et al, 2007). Teachers in Asian countries such as the Philippines are also often judged based on student outcomes (Forlin, 2010). It is thus not surprising that student's academic achievement is a primary concern among teachers.

Additionally, the socio-emotional well-being of CSN is identified as a concern. This includes their participation in classroom activities and the degree of their interaction with their peers. Koster, Nakken, Pijl & van Houten (2009) argue that these are important aspects to consider when talking about IE. The issue of bullying also turned out to be a concern, which is a warranted outcome as CSN in many countries actually experience bullying. According to the participants' own experiences, this also happens in the Philippines.

Other Concerns

Lastly, pre-service teachers are also concerned about the parents and the school environment. They argue that parental involvement and collaboration between GenEd and SPED teachers are important to the successful implementation of inclusion. Parental involvement is found to have a positive effect towards children's success (Machen, Wilson & Notar, 2005; Bennett, Deluca & Bruns, 1996). Similarly, Ripley (1997) underscores the benefits of having a good working relationship between SPED and GenEd teachers, such as better student outcomes and more positive peer relationships.

Perceptions on achieving inclusion

The interviewees believe that the necessary support – such as the physical accessibility of schools, the presence of SPED professionals and the appropriate educational materials – are necessary to achieve inclusion. However, teacher training is perceived to be a significant factor as well. Muega (2016) and Bustos et al (2014b) stated in their studies' findings that the lack of knowledge and training is a barrier to the implementation of inclusion in the Philippines. Therefore, addressing the concerns of inclusion in the country entails providing the appropriate support as well.

The last theme of the findings pertains to the possibility of achieving inclusion in the Philippines. While the interviewees think this is possible, they believe that many changes need to be done in order to achieve success. They believe that creating and implementing pertinent laws, and raising people's awareness of the rights of CSN should first be achieved. The survey (Table 16) also showed that pre-service teachers support the inclusion of CSN in mainstream classrooms; more SPED majors agreed with this statement than GenEd majors did. Forlin (2008) observed in a study involving Asian countries that while teachers generally support inclusion, they are also concerned about the feasibility of its implementation. The present situation in the Philippines makes it logical for Filipino pre-service teachers to challenge its feasibility in the country.

6 CONCLUSIONS

This study explored the perceptions of pre-service special- and general-education teachers on the inclusion of children with special needs in the regular classroom. The participants are students.

The research employed a mixed-method approach, using a semi-structured interview and a survey to explore the teachers' perceptions on the subject, including their beliefs and attitudes. The study has the following aims:

1. To examine what pre-service special- and general- education teachers think about the inclusion of CSN in the regular classroom.
2. To explore the difference between the perceptions of pre-service special- and general-education teachers on the inclusion of CSN in the regular classroom.

While the limited number of participants and the choice of target population in both the survey and the interview impacted the extensiveness of the findings, different types of legitimization used for mixed methods of research were employed to ensure that inferences made are credible, trustworthy, dependable and confirmable. Both the qualitative and quantitative data were able to support the aim of the research. However, it might also be possible to arrive at different findings using other methods of research and other sample population, given that different training institutions follow different teaching curricula.

6.1 MAIN FINDINGS

This section shall provide an analysis of the main findings of the data in relation to the research questions of the study.

a.) To examine what pre-service special and general education teachers think about the inclusion of CSN in the regular classroom

The study concludes that pre-service teachers in the Philippines have different perceptions on the inclusion of CSN in the regular classroom. First, the study shows that pre-service teachers have different sentiments on their experiences and training in relation to inclusion. It was found that most of them agree on the positive of

having experience and training on their readiness to include CSN. However, the findings also show that the disparity between their experiences and training may impact how they will eventually be able to implement a more inclusive education.

In particular, participants have recurrently mentioned teacher training as an utmost concern. Many studies have concluded that training is critical to the success of inclusion (de Boer et al, 2013; Avramidis et al, 2000b, Charley, 2015). Teachers who are doubtful of their skills and training will therefore also be reluctant to implement inclusive practices in their classrooms. It is also worrying that the University of the Philippines is already considered one of the best teacher-training institutions in the country, but this reputation is not reflected in the confidence and skills of its students. It is thus also apparent that this lack of skills should be addressed at the pre-service teacher training level (Muega, 2016; Bustos et al, 2014b). However, as Muega (2016) also argued, “high-quality training may only be realized if the teacher education institution has the necessary resources to fully equip inclusive schoolteachers.” (p.25)

Secondly, the study also showed that participants had different beliefs on the different aspects of inclusion. It was found that the understanding and definition of inclusion among pre-service teachers seem unclear. Moreover, the fact that majority of the participants are not fully aware of the basis of considering inclusion as the child’s fundamental right is problematic. This is not surprising, however, given that the government itself has failed to provide a clear definition of inclusion in its policies. This lack of clear definition of inclusion, ultimately, negatively affects the implementation of the inclusion agenda (UNESCO, 2016; Sharma et al, 2007). This issue needs to be addressed because IE is more than placing the child in a general classroom, but is also about creating an educational system that responds to and addresses the needs of diverse learners (Paliokosta & Blandford, 2010; UNESCO, 2009b). It is therefore necessary to address this gap if inclusion is to be achieved.

Moreover, the research shows that participants recognize the benefits of inclusion among teachers themselves; they agree that inclusion is possible eventually. However, they are also clear in believing that policies and support from the general public must first be in place. Given that the teachers also have some concerns about

how inclusion is to be realized, it can be gleaned that their hesitation to fully agree to CSN's total inclusion stems from their concerns about its impact on teachers' workload, the readiness of the system and the support necessary for the effective implementation of inclusion in the future. Without addressing these concerns, it is highly possible that pre-service teachers would develop negative sentiments and attitudes towards IE. These negative attitudes tend to promote exclusion and discrimination, and will gravely impact the implementation of inclusion (Norwich, 1994; Pivik et al, 2002). In the end, having Filipino teachers with negative attitudes towards inclusion will spell the failure of any plan to realize IE in the Philippine education system.

b.) To explore the difference between the perceptions of pre-service special and general education teachers about the inclusion of CSN in the regular classroom.

The findings of the study suggest that pre-service special- and general-education teachers varied in their perceptions towards inclusion. In general, the results of the survey show that SPED majors hold more positive perceptions about IE compared to GenEd majors. Sze (2009) argues that teachers with negative attitudes are less effective in including children with disabilities, and that their attitudes are the most important predictors of a successful IE implementation. She further argues that as countries promote inclusion, general-education teachers are poised to take on more diverse learners in their classrooms.

It is important to take this observation into account when talking about the Philippine setting. As the study shows, general-education majors hold negative opinions about inclusion. The findings show that they feel less prepared, and rightly so as they receive far less training in teaching CSN. To address these negative attitudes, it is crucial that the general-education curriculum be revised to allow for more appropriate and sufficient training for teaching CSN (Charley, 2015). According to a study by Garriott, Miller and Synder (2003):

“To alleviate the misconceptions about inclusive education and the fears general education teachers have about their ability to teach students with disabilities, preservice teachers should be provided the knowledge and skills that will enable them to feel competent to accommodate the learning

needs of a diverse student population. Preservice teachers must be aware of and be able to implement teaching approaches that enhance the success of students with special needs in inclusive settings, (p. 51)”

The findings of the present research also show that collaboration between special- and general-education teachers is a vital factor when discussing inclusion. However, as was noted in the research, general- and special-education majors are, by practice, placed in settings where there are fewer opportunities for them to collaborate with one another. Rosenzweig (2009) states that an on-going teamwork between special- and general-education teachers, including other relevant professionals, is necessary for inclusive models to be effective. She recommends for universities to take the necessary steps to allow both general- and special-education majors to work together, as early as during their pre-service training. This will help prepare them for working collaboratively in school systems (Rosenzweig, 2009).

6.2 LIMITATIONS OF THE STUDY

The research is limited to the exploration of the perceptions of special- and general-education majors in the University of the Philippines. It employed a semi-structured interview with final-year students. A larger-scaled survey using an adapted version of Saloviita’s (2015) TAIS scale and a short demographic questionnaire about their prior experience and training were likewise used.

While the sample was sufficient enough to represent the target population, the inferences made cannot be representative of Filipino student teachers in general. As it is, teacher-training institutions in the country follow different teacher-training curriculum. Furthermore, due to the limited studies on the perceptions on the subject of teachers in the Philippines, it was difficult to assess whether the findings were similar to other studies made in the country.

6.3 CONCLUDING REMARKS

The present study demonstrates that pre-service teachers in the Philippines have yet to develop a full understanding of inclusion. The fact that majority of the respondents still see the learner as the problem, as the one who has to catch up with

peers and earn the right to be in a mainstream classroom, shows that there still is a lot of work to be done.

Further, these teachers' lack of knowledge and training in handling CSN is worrisome, and is likely to result in developing negative perceptions about inclusion. As UNESCO (2009a) points out, "inclusion requires a shift in people's attitudes and values" (p.18). While changes would indeed take time, pre-service training is an ideal period to address many of these concerns, including teachers' negative attitudes and their lack of the required skills. Moreover, efforts to implement inclusion in the country should be the project not just of the education sector but of the other members of society.

6.4 RECOMMENDATIONS

The results of this research study bring to fore the following recommendations. First, the findings suggest that prior experience and training are important factors in developing positive perceptions among pre-service teachers towards inclusion. However, due to the limitations of the present research, this can still be investigated further. Future research on this particular aspect may provide useful information on how to improve teacher-training in the country.

Further, it is recommended that the present teacher-training program in the university be re-evaluated and re-assessed. It is apparent from the findings that certain aspects of the curriculum can still be expanded or strengthened, based on the participants' opinions. While these findings cannot be accepted as the only and the absolute "truth", it is nevertheless crucial for universities to also involve student-teachers and take their perceptions into account when creating teacher-education programs. Moreover, the findings show that there is a need to address the disparity between the training of general- and special-education majors. Lastly, the government is also expected to take the lead in determining how inclusion should be implemented in the country. The passing of the proposed Special Education Act of 2008 should be a priority. There is a need to advocate for increased public awareness about inclusion and the rights of CSN. It is high time that the country undertakes the necessary steps to ensure that it indeed provides quality and appropriate education for all, particularly students with special needs.

BIBLIOGRAPHY

- Ahsan, M., Sharma, U., & Deppeler, J., (2012) Exploring Pre-Service Teachers' Perceived Teaching Efficacy, Attitudes and Concerns about Inclusive Education in Bangladesh. *International Journal of Whole Schooling*, 8 (2), 1-20.
- Ainscow, M., Booth, T., & Dyson, A. with Farrell, P., Frankham, J., Gallannaugh, F., Howes, A. and Smith, R. (2006) *Improving Schools, Developing Inclusion*. London: Routledge Taylor & Francis Group.
- Alghazo, E. M., Dodeen, H., & Algaryouti, I. A. (2003). Attitudes of pre-service Teachers towards persons with disabilities: Predictions for the success of inclusion. *College Student Journal*, 37(4), 515-522.
- Avramidis, E., Bayliss, P. and Burden, R. (2000a) Student teachers' attitudes towards the inclusion of children with special educational needs in the ordinary school. *Teaching and teacher education*, 16(3), 277-293.
- Avramidis, E., Bayliss, P., & Burden, R. (2000b). A survey into mainstream teachers' attitudes towards the inclusion of children with special educational needs in the ordinary classroom in one local educational authority, *Educational Psychology*, 20 (2), 191-211.
- Avramidis, E., & Kalyva, E. (2007). The influence of teaching experience and Professional development on Greek teachers' attitudes towards inclusion. *European Journal of Special Needs Education*, 22(4), 367–389.
- Avramidis, E. and Norwich, B. (2002) Teachers' attitudes towards integration/inclusion: a review of the literature. *European Journal of Special Needs Education*, 17 (2), 129-147.
- Barnes, M. C., & Gaines, T. (2015). Teachers' Attitudes and Perceptions of Inclusion in Relation to Grade Level and Years of Experience. *Electronic Journal for Inclusive Education*, 3(3)
- Beacham, N. & Rouse, M. (2012). Student teachers' attitudes and beliefs about inclusion and inclusive practice. *Journal of Research in Special Educational Needs*, 12, 3–11. doi:10.1111/j.1471-3802.2010.01194.x

- Bennett, T., Deluca, D., & Bruns, D. (1997). Putting inclusion into practice: Perspectives of teachers and parents. *Exceptional Children*, 64(1), 115-131.
- Bowman, I. (1986). Teacher training and the integration of handicapped pupils: Some findings from a fourteen nation UNESCO study. *European Journal of Special Needs Education*, 1(1), 29-38.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- Brownlee, J., & Carrington, S. (2000). Opportunities for authentic experience and reflection: A teaching programme designed to change attitudes towards disability for pre-service teachers. *Support for Learning*, 15(3), 99-105.
- Bruster, D. D. (2014). *Comparing the perceptions of inclusion between general education and special education teachers* (Doctoral dissertation, Liberty University).
- Buell, M. J., Hallam, R., Gamel-McCormick, M., & Scheer, S. (1999). A survey of general and special education teachers' perceptions and inservice needs concerning inclusion. *International journal of disability, development and education*, 46(2), 143-156.
- Burke, K., & Sutherland, C. (2004). Attitudes toward inclusion: Knowledge vs. experience. *Education*, 125(2), 163.
- Bustos, M.T., Preclaro-Ongtengco, H., Echavia, D., Tantengco, M., & Manglicmot, J., (2014a) *Inclusive Education for Indigenous and Muslim Learners: Assessment of the Education Sector's Readiness to Provide and Sustain Services for IP/Muslim Children with Disabilities Final Report*. Research and Development Foundation of the College of Education Inc. College of Education. University of the Philippines Diliman
- Bustos, M.T., Tantengco, M.T., Abaya, E., Alcantara, E., Javiniar, J., Magtoto, F., Marabe, J., Wong, J., Baron, K., Bazer, S., Da-Ano, R., Garcia, J., & Nepomuceno, J. (2014b) *Towards Enhanced Inclusive Education in the Philippines Terminal Report*. Research and Development Foundation of the College of Education Inc. College of Education. University of the Philippines-Diliman
- Bustos, R., Lartec, J., De Guzman, A., Casiano, C., Carpio, D., & Tongfoyen, H.

- (2012) *Integration of Inclusive Education Subject in the Curriculum of Pre-service Teachers towards Transformation: Exploring its Impact and Effectiveness*. Asian Conference on Education. Osaka, Japan
- Campbell, J., Gilmore, L. & Cuskelly, M. (2003) Changing student teachers' attitudes towards disability and inclusion. *Journal of Intellectual and Developmental Disability* 28 (4) 369-379
- Carter, E. W., & Hughes, C. (2006). Including high school students with severe disabilities in general education classes: Perspectives of general and special educators, paraprofessionals, and administrators. *Research and Practice for Persons with Severe Disabilities*, 31(2), 174-185.
- Charley, C. Y. (2015). *General Education and Special Education Teachers' Attitudes Toward Inclusion*. (Doctoral Dissertation, Walden University).
- Committee on the Rights of Persons with Disabilities (2014) *Consideration of reports submitted by States parties under article 35 of the Convention Initial report of State Parties due in 2010: The Philippines*. Retrieved April 21, 2016 from <https://documents-dds-ny.un.org/doc/UNDOC/GEN/G15/249/60/PDF/G1524960.pdf>
- Creswell, J. W. (2014). *A concise introduction to mixed methods research*. Sage Publications.
- Daniels, H. (2009). Vygotsky and inclusion. In P.Hick, R. Kershner & P. Farrell (Eds) *Towards a psychology for inclusive education: new directions in theory and practice*, (pp.25-37). London: Routledge.
- De Boer, A., Pijil, S.P., & Minnaert, A. Regular Primary School Teachers' Attitudes towards Inclusive Education: A Review of the Literature. *International Journal of Inclusive Education*, 15 (3), 331-353.
- Department of Education (July 2009) *Inclusive Education as Strategy for Increasing Participation Rate of Children*. Retrieved May, 2, 2016 from <http://www.deped.gov.ph/>
- Ebol, S. (n.d.) *Philippines*. Retrieved February 18, 2016 from http://www.nise.go.jp/kenshuka/josa/kankobutsu/pub_d/d-175/d-175_1_10.pdf
- Elhoweris, H., & Alsheikh, N. (2004). Teachers' Attitudes toward

- Inclusion. *Online Submission*. Paper presented at the New York State Federation of the Council for Exceptional Children (Albany, NY, Nov 2004) Retrieved from <http://eric.ed.gov/?id=ED490698>
- Elliot, S. (2008). The Effect of Teachers' Attitudes Toward Inclusion on the Practice and Success Levels of Children With and Without Disabilities in Physical Education. *International Journal of Special Education*, 23 (3), 48-55
- Forlin, C. (2010). Teacher education reform for enhancing teachers' preparedness For inclusion. *International Journal of Inclusive Education*, 14(7), 649-653.
- Forlin, C., & Lian, M. G. J. (Eds.). (2008). *Reform, inclusion and teacher education: Towards a new era of special education in the Asia-Pacific region*. Routledge.
- Forlin, C., Earle, C., Loreman, T., & Sharma, U. (2011). The sentiments, attitudes, and concerns about inclusive education revised (SACIE-R) scale for measuring pre-service teachers' perceptions about inclusion. 50-65 Retrieved from http://works.bepress.com/chris_forlin/7/
- Garriott, P.P., Miller, M., & Snyder, L. (2003). Preservice teachers' beliefs about Inclusive education: What should teacher educators know? *Action in Teacher Education*, 25, 48-54.
- Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational evaluation and policy analysis*, 11(3), 255-274.
- Hallahan, D., & Kaufmann, J., (2006) *Exceptional learners: introduction to special education* (10th edition). Pearson
- Hastings, R., & Oakford, S., (2003). *Student teachers' attitudes towards the inclusion of children with special needs*. *Educational Psychology in Practice*, 23 (1), 87-94.
- Heward, W. L. (2013). *Exceptional children: An introduction to special education*. Boston: Pearson

- Hobbs, T., & Westling, D. L. (1998). Inclusion Promoting Successful through Collaborative Problem-Solving. *Teaching exceptional children*, 31(1), 12-19.
- Hull, J. R. (2005). *General Classroom and Special Education Teachers' Attitudes Toward and Perceptions of Inclusion in Relation to Student Outcomes*. (Doctoral dissertation The University of West Florida)
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational researcher*, 33(7), 14-26.
- Katsafanas, J. D. (2007). *The Roles and Responsibilities of Special Education Teachers* (Doctoral dissertation, University of Pittsburgh).
- Klehm, M. (2014). The effects of teacher beliefs on teaching practices and achievement of students with disabilities. *Teacher Education and Special Education: The Journal of the Teacher Education Division of the Council for Exceptional Children*, 37(3), 216-240.
- Koster, M., Nakken, H., Pijl, S. J., & van Houten, E. (2009). Being part of the peer group: A literature study focusing on the social dimension of inclusion in education. *International Journal of Inclusive Education*, 13(2), 117-140.
- Kuyini, A. B. & Desai, I. (2007). Principals' and Teachers' Attitudes and Knowledge of Inclusive Education as Predictors of Effective Teaching practices in Ghana. *Journal of Research in Special and Inclusive Education*, 7, (2), 104-113
- Leatherman, J.M., & Niemeyer, J.A. (2005). Teachers' attitudes towards inclusion: Factors influencing classroom practice. *Journal of Early Childhood Teacher Education*, 26(1), 23-36
- Leech, N. L., & Onwuegbuzie, A. J. (2009). A typology of mixed methods Research designs. *Quality & quantity*, 43(2), 265-275.
- Leyser, Y., Kapperman, G., & Keller, R. (1994). Teacher attitudes toward mainstreaming: a cross-cultural study in six nations. *European Journal of Special Needs Education*, 9(1), 1-15.
- Loreman, T, Forlin, C. and Sharma, U. (2007) An International Comparison of

- Pre-service Teacher Attitudes towards Inclusive Education. *Disability Studies Quarterly*, 27 (4) DOI: <http://dx.doi.org/10.18061/dsq.v27i4.53>
- Machen, S., Wilson, J., & Notar, C. (2005). Parental involvement in the classroom. *Journal of Instructional Psychology*, 32(1), 13-16
- Mangope B, Mannathoko MC, Kuyini-Abubakar A. (2013) Pre-Service Physical Education Teachers and Inclusive Education: Attitudes, Concerns and Perceived Skill Needs. *International Journal of Special Education*, 28 (3), 82-92.
- Manstead, A.S.R. and Semin, G.R. (2001) Methodology in social psychology: tools to test theories. In Hewstone, M. and Stroebe, W. (eds), *Introduction to Social Psychology*, 3rd ed. Blackwell, Oxford, pp. 81–122
- McLeod, S. A. (2013). *Erik Erikson*. Retrieved April 15, 2016 from www.simplypsychology.org
- Monsen, J.J. & Frederickson, N. (2004). Teachers' Attitudes Towards Mainstreaming and Their Pupils' Perceptions of Their Classroom Learning Environment. *Learning Environments Research*, 7, 129-142. doi:10.1023/B:LERI.00000037196.62475.32
- Muega, M.A. (2016) Inclusive Education in the Philippines: Through the Eyes of Teachers, Administrators and Parents of Children with Special Needs. *Social Science Diliman: A Philippine Journal of Society and Change*, 12 (1), 5-28.
- Muega, M.A. & Echavia, D. (2011) Inclusion of Exceptional Students in Regular Classrooms: School Readiness and Teachers' Knowledge and Willingness (unpublished article) cited in Muega, M.A. (2016) Inclusive Education in the Philippines: Through the Eyes of Teachers, Administrators and Parents of Children with Special Needs. *Social Science Diliman: A Philippine Journal of Society and Change*, 12 (1), 5-28
- Newby, P. (2014) *Research Methods for Education 2nd ed.* London: Routledge

- Norwich, B. (1994) The relationship between attitudes to the integration of children with special educational needs and wider socio-political views: a US-English comparison. *European Journal of Special Needs Education*, 9, 91-106.
- Norwich, B., & Kelly, N. (2004). Pupils' views on inclusion: Moderate learning difficulties and bullying in mainstream and special schools. *British Educational Research Journal*, 30(1), 43-65.
- O'Leary, Z. (2004). *The essential guide to doing research*. London: Sage
- Onwuegbuzie, A. J., & Combs, J. P. (2010). Emergent data analysis techniques in Mixed methods research: A synthesis. *Handbook of mixed methods in social and behavioral research*, 2.
- Onwuegbuzie, A. J., & Johnson, R. B. (2006). The validity issue in mixed research. *Research in the Schools*, 13(1), 48-63.
- Orr, A. C. (2009). New Special Educators Reflect about Inclusion: Preparation and K-12 Current Practice. *Journal of Ethnographic & Qualitative Research*, 3(4).
- Paliokosta, P., & Blandford, S. (2010). Inclusion in school: a policy, ideology or Lived experience? Similar findings in diverse school cultures. *Support for Learning*, 25(4), 179-186.
- Parasuram, K. (2006). Variables that affect teachers' attitudes towards disability and inclusive education in Mumbai, India. *Disability & Society*, 21(3), 231-242.
- Parker, S. (2009). *A comparison of the attitudes of secondary regular and special Education teachers toward inclusion of students with mild disabilities in their classrooms*. (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3351258).
- Pivik, J., McComas, J., & Laflamme, M. (2002). Barriers and facilitators to Inclusive education. *Exceptional children*, 69(1), 97-107.
- Republic of the Philippines (2013) *Early Years Act of 2013*. Retrieved October 20, 2015 from <http://www.gov.ph/>
- Republic of the Philippines (2013) *Enhanced Basic Education Act of 2013*. Retrieved October 20, 2015 from <http://www.gov.ph/>

- Ripley, S. (1997). Collaboration between General and Special Education Teachers. ERIC Digest.
- Rogers, J. (1993) The Inclusion Revolution. *Phi Delta Kappa Research Bulletin*, 11, 1-6
- Rosenzweig, K. (2009,October). *Are Today's General Education Teachers Prepared to Meet the Needs of Their Inclusive Students?*. In NERA Conference Proceedings
- Saldaña, J. (2009) *The coding manual for qualitative researchers*. London.Sage
- Saloviita, T. (2015) Measuring pre-service teachers' attitudes towards inclusive education: Psychometric Properties of the TAIS scale. *Teaching and Teacher Education*, 52, 66-72.
- Saloviita, T., & Schaffus, T. (2016). Teacher attitudes towards inclusive education in Finland and Brandenburg, Germany and the issue of extra work. *European Journal of Special Needs Education*, 31 (4), 458-471. doi:10.1080/08856257.2016.1194569.
- Sari,H., Celikoz, N., & Secer, Z., (2009). An analysis of pre-school teachers' and Student teachers' attitudes to inclusion and their self-efficacy. *International Journal of Special Education*, 24 (3), 29-44.
- Scruggs, T., & Mastropieri, M., (1996). Teacher Perceptions of Mainstreaming/Inclusion 1958 -1995: A Research Synthesis. *Exceptional Children*, 63 (1), 59-74. doi: 10.1177/001440299606300106.
- Seçer, Z. (2010). An analysis of the effects of in-service teacher training on Turkish preschool teachers' attitudes towards inclusion. *International Journal of Early Years Education*, 18(1), 43-53.
- Senate of the Philippines. (October, 2011) *Philippine Senate Bill 3002: Special Education Act*. Retrieved April 30, 2016 from <https://www.senate.gov.ph/>
- Shade, R. A., & Stewart, R. (2001). General education and special education preservice teachers' attitudes toward inclusion. *Preventing School Failure: Alternative Education for Children and Youth*, 46(1), 37-41.
- Sharma, U., Ee, J., & Desai, I. (2003). A comparison of Australian and Singaporean pre-service teachers' attitudes and concerns about inclusive education. *Teaching and learning*, 24 (2), 207-217.

- Sharma, U., Forlin, C., Deppeler, J., & Yang, G. X. (2013). Reforming teacher education for inclusion in developing countries in the Asia Pacific region. *Asian Journal of Inclusive Education*, 1(1), 3-16.
- Sharma, U., Forlin, C., & Loreman, T., (2008) Impact of training on pre-service teachers' attitudes and concerns about inclusive education and sentiments about persons with disabilities, *Disability & Society*, 23 (7), 773-785. DOI: 10.1080/09687590802469271
- Sharma, U., Forlin, C., Loreman, T., & Earle, C. (2006). Pre-Service Teachers' Attitudes, Concerns and Sentiments about Inclusive Education: An International Comparison of Novice Pre-Service Teachers. *International Journal of special education*, 21(2), 80-93.
- Sharma, U., Moore, D., & Sonawane, S., (2009). Attitudes and concerns of pre-service teachers regarding inclusion of students with disabilities into regular schools in Pune, India. *Asia-Pacific Journal of Teacher Education*, 37 (3), 319-33. dx.doi.org/10.1080/13598660903050328
- Showalter-Barnes, K. (2008). *The attitudes of regular education teachers regarding inclusion for students with autism*. (Doctoral Dissertation, Walden University)
- Smith, M. & Smith, K., (2000) I Believe in Inclusion, But...”: Regular Education Early Childhood Education. *Journal of Research in Childhood Education*, 14 (2), 161-180.
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research* (Vol. 15). Newbury Park, CA: Sage.
- Sze, S. (2009). A Literature Review: Pre-Service Teachers’ Attitudes Toward Students with Disabilities. *Education*, 130(1), 53.
- United Nations Educational, Scientific and Cultural Organization (2016) *Barriers to Inclusive Education Teacher Education*. Retrieved April 15, 2016 from <http://www.unescobkk.org/education/inclusive-education>
- United Nations Educational, Scientific and Cultural Organization (2015) *Education for All 2015 National Review Report: Philippines*. Retrieved March 25, 2016 from <http://unesdoc.unesco.org>

- United Nations Educational, Scientific and Cultural Organization (2005).
Guidelines for Inclusion: Ensuring Access to Education for All. France:
 United Nations Educational, Scientific and Cultural Organization (2009a) *Policy
 Guidelines on Inclusion in Education*. Retrieved April, 20, 2016 from
<http://unesdoc.unesco.org>
- United Nations Educational, Scientific and Cultural Organization, (2009b)
Towards Inclusive Education for Children with Disabilities: A Guideline.
 Retrieved March 20, 2016 from
<http://www.uis.unesco.org/Library/Documents/disabchild09-en.pdf>
- University of the Philippines College of Education (2016) *College of Education*.
 Retrieved January 23, 2016 from www.upd.edu.ph
- Urquhart, I. (2009) The Psychology of Inclusion: The Emotional Dimension. In In
 P.Hick, R. Kershner & P. Farrell (Eds) *Towards a psychology for inclusive
 education: new directions in theory and practice* (pp. 66-78). London:
 Routledge.
- Varcoe, L., & Boyle, C. (2014). Pre-Service Primary Teachers' Attitudes towards
 Inclusive Education. *Educational Psychology*, 34 (3), 323-337.
- Vygotsky, L. (1978) Interaction Between Learning and Development. In Gauvain
 & Cole (Eds.) *Readings on the Development of Children* (pp. 34-40). New
 York: Scientific American Books.
- Webster, J. (2015). *General Education-The Education Everyone Should Be
 Provided*. Retrieved Nov. 15, 2015 from <http://specialed.about.com/>
- Yadav, M., Das, A., Sharma, S. & Tiwari, A. (2015). Understanding Teachers'
 Concerns about Inclusive Education. *Asia Pacific Education Review*, 16 (4),
 653-662.

APPENDIX

A. INTERVIEW GUIDE

Experience

1. Have you had prior experience or exposure with people with special needs? Describe briefly your experience. Do you know someone personally or have you taught anyone with special needs? Have you had a chance to have a co-student with special needs?
2. Do you think prior experience helps prepare you in teaching CSN?
3. How important do you think it is that student teachers like yourself are given prior exposure to students with special needs? Why?

Training

1. Have you received training on teaching students with SEN? If yes, describe your experience.
2. Do you think that it is necessary for education students to be given training on teaching students with special needs regardless of their majors? Why or why not?
3. What kind of knowledge or training do you think is useful in preparing student teachers like yourself to be better prepared to teach students with special needs in the mainstream classroom?
4. In your opinion, is it necessary to include the topic of inclusive education in the education curriculum? Why or why not?
5. As a student teacher, what concerns you the most when handling students with special needs in the general education classroom?

Classroom Placement and Role of General and Special Ed teachers

1. What do you think is the ideal classroom placement for a child with SEN? Why do you think that is?
2. What factors do you think should be considered when placing the child in the mainstream classroom? (type of disability, familial beliefs, socio-emotional skills etc.)
3. What role do you think a general education classroom teacher plays in the learning of a child with SEN in the mainstream classroom?
4. What role do you think a special education classroom teacher plays in the learning of a child with SEN in the mainstream classroom?
5. As a general ed/special ed major, what kind of support do you think is necessary for you to be able to include learners with special needs in the mainstream classroom? Why do you think these are important?

Beliefs about Inclusion

1. Do you agree that general education teachers should be required to accept students with special needs in the classroom? How do think these would impact their workload?
2. Some advocates believe that inclusive education is a fundamental right of the child and that putting children with SEN in segregated schools is a violation of their right, do you agree with this statement, why or why not?
3. What do you think are the benefits of pushing for inclusive education? In your opinion, what are the strengths and weaknesses of inclusion?
4. Do you believe that inclusive education is possible in the Philippines? Why or why not? What do you think is needed for inclusive education to be realized in the Philippines?

B. INFORMATION SHEET

RESEARCH INFORMATION SHEET

Project Title: Student Teachers' Perceptions on Inclusive Education in the Philippines

Name of Researcher: Franchez Lynette Torres

Name of Supervisor: Sarka Kanova

Introduction

I am a postgraduate student at Charles University (Prague, Czech Republic), and I am pursuing an Erasmus Mundus Ma/Mgr in Special and Inclusive Education. I am currently in the process of conducting a study for my dissertation as partial fulfilment of the degree's requirements. The research takes place in Manila, Philippines. More information about the study is provided in the following sections. Further clarifications about the research can be provided upon request from participants.

Purpose of the study

The purpose of this study is to investigate the perceptions including the attitudes and beliefs of student teachers in the Philippines about inclusive education. It aims to provide an understanding of how general education and special education majors perceive inclusive education. Teacher perception has been identified as a crucial factor in facilitating inclusive education. This research attempts to bridge the gap in this crucial area and may provide relevant data in the implementation of inclusive education in the Philippines.

Research procedures

The research will employ survey methods and interviews to investigate the perceptions of the participants. The survey will be distributed both manually and electronically. The interviews shall be audio-recorded, and shall take place in the university campus. The interviews shall be conducted using participants' language of choice (English or Filipino). Consent to the recording shall be obtained before interview.

Voluntary participation and right to withdraw

Your participation in this project is entirely voluntary. You may withdraw from the study at any time or request not to use in this study information gained from you. The researcher is obliged to honour this agreement.

Timeframe

Data collection will take place in August to September 2016. Interviews with the participants shall be conducted within this period. Each interview sessions shall take between 45 to 60 minutes.

Confidentiality

Results of this study may be published or presented at conferences; however, information collected in this research shall be kept private and the identities of the participants shall not be shared with the public. The recordings of the interviews will be stored in a secure place and only the researcher will have access to those files. The names of the participants will be changed in the dissertation, and their anonymity will be protected.

Contacts

To seek clarification or further information, you may contact the researcher through the following email address: lynette03torres@gmail.com

C. CONSENT FORM

CONSENT FORM

Participant

I have been invited to participate in the study on the perceptions of student teachers on inclusive education. I have read the foregoing information. I have had the opportunity to ask questions, and all my questions have been answered to my satisfaction. I voluntarily take part in this study. I authorise the recording of the interview, and I give my permission to use the information collected during the interview for the purposes of the research.

Name of the Participant: _____

Major of Study: _____

Contacts of the Participant

Email address: _____

Phone number: _____

Signature of the Participant: _____

Researcher

I commit to respect all the ethical guidelines and obligations contained in the present consent form.

Signature of the Researcher: _____

Date: _____

(day/month/year)

D. FINAL SURVEY TOOL

PRE-SERVICE TEACHER ATTITUDES TO INCLUSION SCALE

Gender: _____

Years of Studying in Education: _____

Degree: _____ Major: _____

Have you had prior experience with students with SEN (Special Educational Needs)?

Yes _____ No _____

If yes? Check the box or boxes that best describe/s your experience?

- ☐ I have a family member with SEN
☐ I know other people with SEN personally
☐ I have taught children with SEN
☐ others: (please specify) _____

Have you received training on teaching students with SEN?

Yes _____ No _____

If yes? Check the box or boxes that best describe/s your training?

- ☐ I have attended a seminar on teaching students with SEN
☐ I completed a course on teaching students with SEN
☐ others: (please specify) _____

The following statements pertain to different statements about inclusive education. Please circle the response that best reflects your opinion on each statement.

	Strongly disagree (SD)	Disagree (D)	Agree (A)	Strongly Agree (SA)
1. Children with special educational needs learn best in their own special education classes where they have specially trained teachers.	SD	D	A	SA
2. The education of children with emotional and behavioral problems should be arranged in mainstream classrooms with the provision of adequate support.	SD	D	A	SA
3. It is the right of a child with special educational needs to get into a special education classroom.	SD	D	A	SA
4. Children with physical impairments (visual, hearing, mobility etc.) should be admitted in mainstream classrooms with adequate support.	SD	D	A	SA
5. Teachers' workload should not be increased by compelling them to accept children with special educational needs in their classrooms.	SD	D	A	SA
6. The best result is achieved if each child with special educational needs is placed in a special education classroom that best suits him/her.	SD	D	A	SA
7. The education of students with special educational needs should be done as much as possible in mainstream classrooms.	SD	D	A	SA
8. Integrated children with special educational needs create extra work for teachers in mainstream classrooms.	SD	D	A	SA
9. The education of children with less severe disabilities such as ADHD and learning disability should be in a regular classroom.	SD	D	A	SA
10. The learning of children with special educational needs can be effectively supported in mainstream classrooms as well.	SD	D	A	SA

E. LETTER TO DEAN OF THE COLLEGE OF EDUCATION

Dr. Therese Bustos

Dean

College of Education

University of the Philippines-Diliman

Dear Dr. Bustos,

Good day! I am Franchez Lynette Torres, a post-graduate student of Charles University (Prague, Czech Republic) and I am pursuing an Erasmus Mundus MA/Mgr in Special and Inclusive Education. I am currently in the process of conducting a study for my dissertation as partial fulfilment of the degree's requirement.

My research focuses on investigating the perceptions including the attitudes and beliefs of student teachers in the Philippines about inclusive education. It aims to provide an understanding of how general and special education majors perceive inclusive education.

In line with my research, I would like to ask your permission to conduct a survey and interviews with the students of the College of Education in UP Diliman. Participation of the students will be voluntary and upon the discretion of the instructors and professors in each class.

I am hoping for your favourable response.

Many thanks.

Sincerely yours,

Franchez Lynette Torres

F. SAMPLE LETTER TO INTERVIEW PARTICIPANTS

Dear Mr/Ms _____,

Good day,

I am Lynette Torres from the Charles University in Prague and I am inviting you to participate in my research: Student Teachers' Perceptions on Inclusive Education in the Philippines.

I will be conducting **one-on-one interviews. I am looking for 3 - 4 participants for each two groups of interviewees. One group of SPED majors and one group of GenEd majors.**

I have attached the information sheet and the consent form for you. Please do not hesitate to contact me if you would need additional details. **If you are interested to participate, please reply with your name, major and contact details so that we can arrange a suitable time to conduct the interview.**

I will be truly grateful for your participation in my study and I do urge you to participate. The Philippines is quite behind when it comes to research on Inclusive Education and this is one of the reasons I am pursuing this topic.

Many thanks and I look forward to your favourable response.

Sincerely,
Lynette Torres

G. DEMOGRAPHIC DATA OF SURVEY RESPONDENTS

Table 17: Survey respondents' sex

Male	19
Female	51
TOTAL	70

Table 18: Survey respondents' year of study

First year	20
Second year	17
Third year	17
Fourth year	13
Fifth year	3
TOTAL	70

H. DESCRIPTIVE STATISTICS OF TAIS SCORES

Table 19: Descriptive statistics of SPED majors: Overall

<i>Descriptive Statistics: SPED</i>	
Mean	28.1429
Standard Error	0.4695
Median	28
Mode	28
Standard Deviation	2.7775
Sample Variance	7.7143
Kurtosis	-0.8574
Skewness	0.3152
Range	9
Minimum	24
Maximum	33
Sum	985
Count	35
Confidence Level (95.0%)	0.954090994

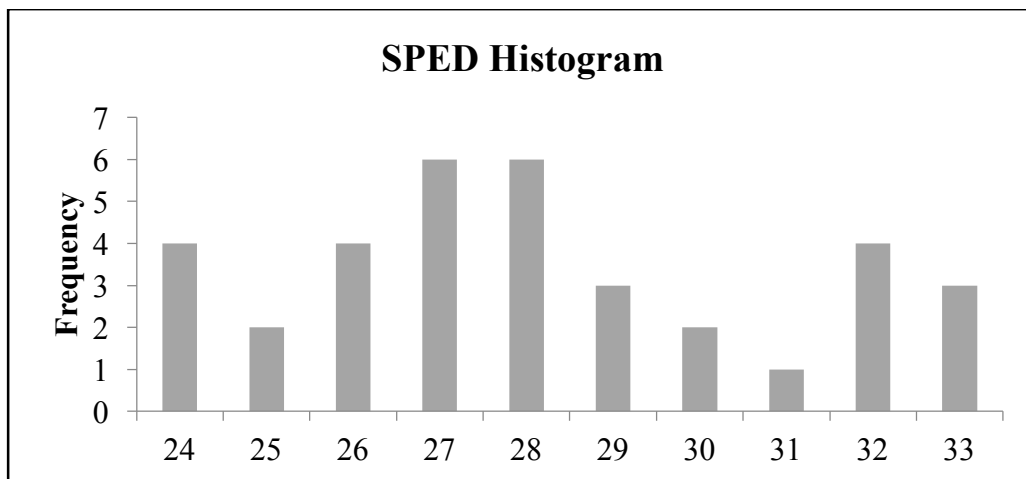


Table 20: Descriptive statistics of GenEd majors: Overall

<i>Descriptive Statistics: Gen Ed</i>	
Mean	24.4857
SE	0.7081
Median	24
Mode	24
Standard Deviation	4.1894
Sample Variance	17.5513
Kurtosis	0.4868
Skewness	0.5148
Range	18
Minimum	17
Maximum	35
Sum	857
Count	35
Confidence Level (95.0%)	1.439116965

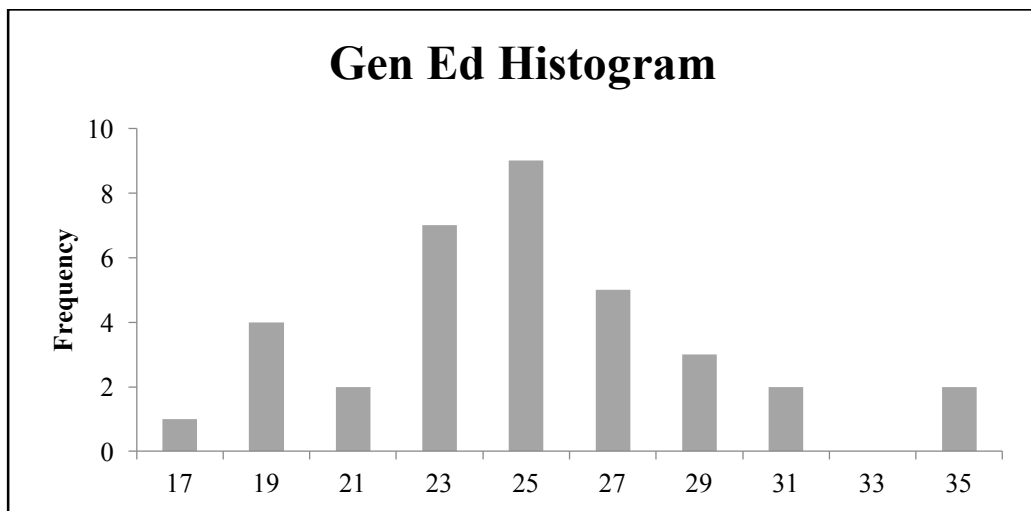


Table 21: Descriptive statistics for statement 1: SPED and GenEd Majors

<i>SPED</i>		<i>GenEd</i>	
Mean	2.4000	Mean	1.8571
Standard Error	0.1021	Standard Error	0.1306
Median	2	Median	2
Mode	2	Mode	2
Standard Deviation	0.6039	Standard Deviation	0.7724
Sample Variance	0.3647	Sample Variance	0.5966
Range	2	Range	3
Minimum	1	Minimum	1
Maximum	3	Maximum	4
Sum	84	Sum	65
Count	35	Count	35

Table 22: Descriptive statistics for statement 2: SPED and GenEd Majors

<i>SPED</i>		<i>GenEd</i>	
Mean	3.2857	Mean	3.0857
Standard Error	0.0968	Standard Error	0.1113
Median	3	Median	3
Mode	3	Mode	3
Standard Deviation	0.5725	Standard Deviation	0.6585
Sample Variance	0.3277	Sample Variance	0.4336
Range	2	Range	2
Minimum	2	Minimum	2
Maximum	4	Maximum	4
Sum	115	Sum	108
Count	35	Count	35

Table 23: Descriptive Statistics for statement 3: SPED and GenEd Majors

<i>SPED</i>		<i>GenEd</i>	
Mean	1.6000	Mean	1.5714
Standard Error	0.0840	Standard Error	0.1249
Median	2	Median	1
Mode	2	Mode	1
Standard Deviation	0.4971	Standard Deviation	0.7391
Sample Variance	0.2471	Sample Variance	0.5462
Range	1	Range	3
Minimum	1	Minimum	1
Maximum	2	Maximum	4
Sum	56	Sum	55
Count	35	Count	35

Table 24: Descriptive statistics for statement 4: SPED and GenEd Majors

<i>SPED</i>		<i>GenEd</i>	
Mean	3.5429	Mean	3.0571
Standard Error	0.1032	Standard Error	0.1226
Median	4	Median	3
Mode	4	Mode	3
Standard Deviation	0.6108	Standard Deviation	0.7253
Sample Variance	0.3731	Sample Variance	0.5261
Range	2	Range	3
Minimum	2	Minimum	1
Maximum	4	Maximum	4
Sum	124	Sum	107
Count	35	Count	35

Table 25: Descriptive statistics for statement 5: SPED and GenEd Majors

<i>SPED</i>		<i>GenEd</i>	
Mean	2.9143	Mean	2.6000
Standard Error	0.1035	Standard Error	0.1174
Median	3	Median	3
Mode	3	Mode	3
Standard Deviation	0.6122	Standard Deviation	0.6945
Sample Variance	0.3748	Sample Variance	0.4824
Range	2	Range	3
Minimum	2	Minimum	1
Maximum	4	Maximum	4
Sum	102	Sum	91
Count	35	Count	35

Table 26: Descriptive statistics for statement 6: SPED and GenEd Majors

<i>SPED</i>		<i>GenEd</i>	
Mean	2.3714	Mean	1.9143
Standard Error	0.1539	Standard Error	0.1320
Median	2	Median	2
Mode	2	Mode	2
Standard Deviation	0.9103	Standard Deviation	0.7811
Sample Variance	0.8286	Sample Variance	0.6101
Range	3	Range	3
Minimum	1	Minimum	1
Maximum	4	Maximum	4
Sum	83	Sum	67
Count	35	Count	35

Table 27: Descriptive statistics for statement 7: SPED and GenEd Majors

<i>SPED</i>		<i>GenEd</i>	
Mean	2.7714	Mean	2.3714
Standard Error	0.1791	Standard Error	0.1425
Median	3	Median	2
Mode	3	Mode	2
Standard Deviation	1.0596	Standard Deviation	0.8432
Sample Variance	1.1227	Sample Variance	0.7109
Range	3	Range	3
Minimum	1	Minimum	1
Maximum	4	Maximum	4
Sum	97	Sum	83
Count	35	Count	35

Table 28: Descriptive statistics for statement 8: SPED and GenEd Majors

<i>SPED</i>		<i>GenEd</i>	
Mean	2.3429	Mean	2.3429
Standard Error	0.1155	Standard Error	0.1226
Median	2	Median	2
Mode	2	Mode	2
Standard Deviation	0.6835	Standard Deviation	0.7253
Sample Variance	0.4672	Sample Variance	0.5261
Range	3	Range	3
Minimum	1	Minimum	1
Maximum	4	Maximum	4
Sum	82	Sum	82
Count	35	Count	35

Table 29: Descriptive statistics for statement 9: SPED and GenEd Majors

<i>SPED</i>		<i>GenEd</i>	
Mean	3.3143	Mean	2.7429
Standard Error	0.1407	Standard Error	0.1318
Median	3	Median	3
Mode	4	Mode	3
Standard Deviation	0.8321	Standard Deviation	0.7800
Sample Variance	0.6924	Sample Variance	0.6084
Range	3	Range	3
Minimum	1	Minimum	1
Maximum	4	Maximum	4
Sum	116	Sum	96
Count	35	Count	35

Table 30: Descriptive statistics for statement 10: SPED and GenEd Majors

<i>SPED</i>		<i>GenEd</i>	
Mean	3.6000	Mean	2.9429
Standard Error	0.1021	Standard Error	0.1475
Median	4	Median	3
Mode	4	Mode	3
Standard Deviation	0.6039	Standard Deviation	0.8726
Sample Variance	0.3647	Sample Variance	0.7613
Range	2	Range	3
Minimum	2	Minimum	1
Maximum	4	Maximum	4
Sum	126	Sum	103
Count	35	Count	35